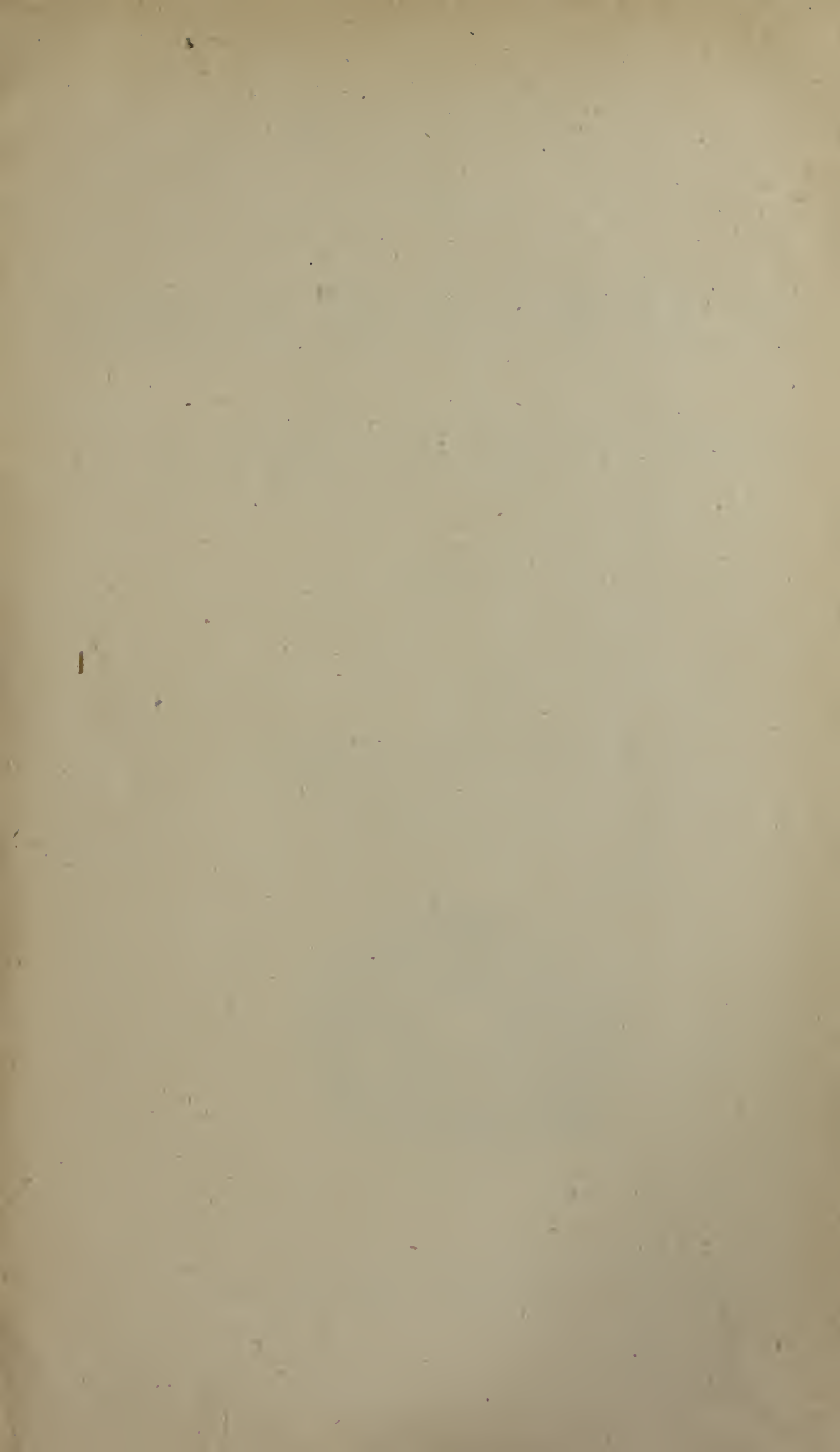


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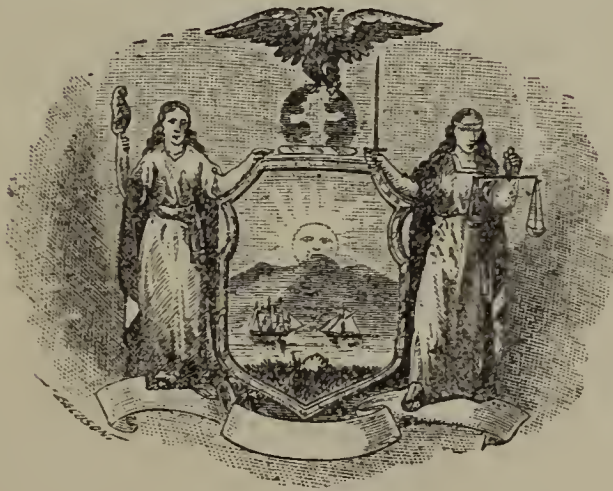
OF THE

ASSEMBLY OF THE STATE OF NEW YORK.

ONE HUNDRED AND SEVENTH SESSION,

1884.

VOLUME VIII.—Nos. 114 to 155, inclusive.



ALBANY:

WEED, PARSONS AND COMPANY, LEGISLATIVE PRINTERS

1884.

STATE OF NEW YORK.

No. 114.

IN ASSEMBLY,

MARCH 10, 1884.

REPORT

OF THE CAPITOL COMMISSIONERS, TRANSMITTING A
COMMUNICATION FROM E. A. BOYD & SONS.

To the Honorable the Assembly of the State of New York :

The undersigned, Edward A. Boyd & Sons, respectfully represents, in answer to the charges lately made in the Assembly, concerning the glass for the storm windows on the north side of the Assembly Chamber ordered, by resolution of your honorable body, to be put in, that the bill of charges presented by the undersigned therefor was not in excess of the usual prices for the quality and kind of glass ordered and put in position, and that the charges of the undersigned therefor are fair and reasonable.

That the glass ordered and put in is of a superior quality and known to the trade as Silvering quality plate glass, being the same kind and quality used for mirror plates.

That the undersigned understood the order for the glass for said windows to be of a kind that would give the least resistance to the admission of light.

The undersigned further says that the glass spoken of in the debate in the Assembly is known as ordinary glazing quality, of polished plate glass, which is an inferior article to that furnished, and much less in price, and could have been furnished by the undersigned at nearly one-half the price of that which was ordered and furnished.

The undersigned further represents that it would have been impossible to have furnished the glass which was ordered and furnished by them, in the time required by the order, for less than the amount charged by them, without loss to themselves. That such glass is manufactured in foreign countries, and if the undersigned could have been allowed time necessary to import it they could have furnished it at a somewhat greater discount than they were able to, being obliged to select it from stock on hand and cut it down.

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For these reasons the undersigned respectfully submits that the criticisms of their charges, made on the floor of the Assembly, were unjust.

Dated *March* 10, 1884.

Respectfully submitted,

EDWARD A. BOYD & SONS,
61 and 63 Wooster street, New York.

STATE OF NEW YORK.

No. 115.

IN ASSEMBLY,

MARCH 12, 1884.

LIST OF SPECIAL GENERAL ORDERS.

The Speaker and Clerk, with the consent of the House, refer the following bills to the Sub-Committee of the Whole:

Printed No. 148, G. O. 146. Introduced by Mr. House:

An act to amend chapter three hundred and fifty-four of the Laws of 1879, entitled "An act for the relief of the New York Tunnel Company."

Printed No. 374, G. O. 369. Introduced by Mr. Kent:

An act for the preservation of fish in the Hudson river.

Printed No. 371, G. O. 366. Introduced by Mr. Whiteman:

An act to amend chapter 534 of the Laws of 1879, entitled "An act for the preservation of moose, wild deer, birds, fish and other game," and the acts amendatory thereof and supplementary thereto.

Printed No. 199, G. O. 196. Introduced by Mr. Van Cott:

An act relative to certificates of sales by sheriffs of real property.

Printed No. 212, G. O. 205. Introduced by Mr. Priddy:

An act to repeal chapter 120 of the Laws of 1862, entitled "An act requiring the highway tax of the New York Central Railroad Company through the town of Mentz to be applied to the repairs of certain highways in the said town," and the several acts amendatory thereof.

Printed No. 222, G. O. 217. Introduced by Mr. Kelly:

An act to amend chapter 117 of the Laws of 1860, entitled "An act to amend an act entitled 'An act in relation to the sale of bottles used by the manufacturers of mineral waters and others.'"

Printed by No. 223, G. O. 219. Introduced by Mr. Kelly:

An act to amend chapter 207 of the Laws of 1847, entitled "An act in relation to the sale of bottles used by the manufacturers of mineral waters and others."

Printed No. 395, G. O. 390. Introduced by Mr. C. W. Brown:

An act to enable the North Afton Rural Cemetery Association of Afton, Chenango county, to acquire control of the old burying ground in North Afton.

Printed No. 126, G. O. 374. Introduced by Mr. Robb (Senate):

An act relative to certificates of sales by sheriffs of real property.

Printed No. 253, G. O. 254. Introduced by Mr. Welch:

An act to amend chapter 695 of the Laws of 1876, entitled "An act to amend an act entitled 'An act to extend the powers of boards of supervisors, except in the counties of New York and Kings,'" passed May 11, 1869.

Printed No. 305, G. O. 297. Introduced by Mr. Hawkins:

An act to authorize the sale of lands under water of Gardiner's and Peconic bays, Long Island, for the planting and cultivation of shell fish.

Printed No. 326, G. O. 327. Introduced by Committee on Ways and Means:

An act to authorize the board of claims to hear, audit and determine the claims of the State for balances due on the books of the comptroller from certain counties.

Printed No. 327, G. O. 605. Introduced by Mr. Shoemaker:

An act to amend chapter 269 of the Laws of 1879, entitled "An act making an appropriation to pay the expenses of the collection of tolls, superintendence, ordinary repairs and maintenance of the canals for the fiscal year commencing on the 1st day of October, 1879, and to provide for a contingent deficiency in the revenues for the calendar year 1879, and making further appropriations out of any unexpended moneys in the treasury to the credit of the fund for extraordinary repairs."

Printed No. 339, G. O. 340. Introduced by Committee on Judiciary:

An act to amend chapter 692 of the Laws of 1866, entitled "An act fixing the fees of justices of the peace and constables in civil and criminal cases, and the fees of jurors and witnesses in justices' courts, and for other purposes."

Printed No. 357, G. O. 352. Introduced by Mr. Howe:

An act to amend section 1 of chapter 40 of the Laws of 1848, entitled "An act to authorize the formation of corporations for manufacturing, mining, mechanical, chemical, agricultural, horticultural, medical or curative, mercantile or commercial purposes," as subsequently modified and amended.

Printed No. 358, G. O. Introduced by Mr. Hodges:

An act to legalize, ratify and confirm a resolution of the board of supervisors of the county of Kings, adopted August 7, 1877, in relation to the compensation of certain county officers.

Printed No. 362, G. O. 357. Introduced by Mr. S. W. Johnson:

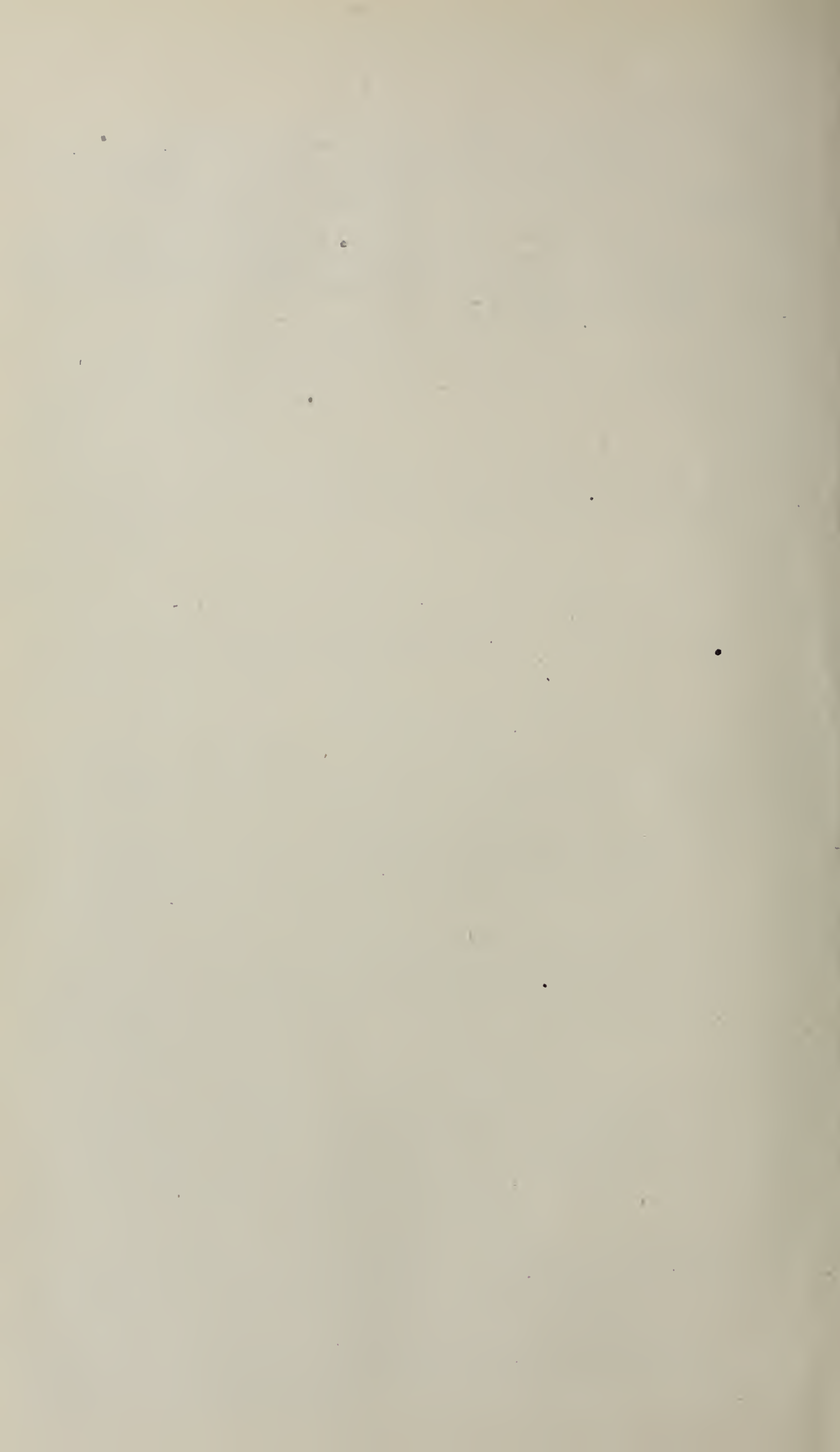
An act authorizing the town of Westchester to borrow money to improve therein highways.

Printed No. 372, G. O. 367. Introduced by Mr. Moore :

An act for the better protection of game in Richmond county.

Printed No. 375, G. O. 370. Introduced by Mr. Hall:

An act to amend section 26 of chapter 721 of the Laws of 1871, entitled "An act to amend and consolidate the several acts relating to the preservation of moose, wild deer, birds and fish," passed April 26, 1871.



STATE OF NEW YORK.

No. 116.

IN ASSEMBLY,

MARCH 12, 1884.

LIST OF SPECIAL ORDERS.

Monday March 17, 1884.

Resolution and adverse report of judiciary committee on the
bill to regulate fees of health officer of the port of New York.

[Assem. Doc. No. 116.] 1

STATE OF NEW YORK.

No. 117.

IN ASSEMBLY.

MARCH 12, 1884.

LIST OF GENERAL ORDERS.

G. O.

403. Introduced by Ways and Means Committee :

An act to amend chapter 361 of the laws of 1881, entitled "An act to amend chapter 542 of the Laws of 1880, entitled 'An act to provide for raising taxes for the use of the State upon certain corporations, joint-stock companies and associations.'"

404. Introduced by Mr. Odell:

An act in relation to abandoned or closed highways, roads or streets.

405. Introduced by Mr. Coffey :

An act to authorize the Board of Supervisors of Kings county, to make suitable provisions to reimburse John Cunningham for all legitimate costs, counsel fees and expenses which were incurred by him in and about a certain action brought against him while holding the office of commissioner of charities for the county of Kings.

406. Introduced by Mr. Hodges :

An act to authorize and enable the county of Kings, for the care, custody and relief of its poor and insane, to purchase, erect and maintain outside the limits of said county, a farm and buildings, and to issue bonds to meet the expense thereof.

407. Introduced by Mr. Howe:

An act to amend section 1003 of the Code of Civil Procedure.

408. Introduced by Mr. Maher :

An act relative to the Quinn and Nolan Ale Brewing company the shares thereof and the conveyance and transfer thereto of certain real and personal property of the minor children of Terrence J. Quinn, deceased.

G. O. .

409. Introduced by Mr. Maher :

An act to regulate the commitment and discharge of certain prisoners, tramps and vagrants, in Albany county and to prescribe the effect thereof, to provide for the support of the prisoners in the jail in the city of Albany, and to fix duties and compensation of the Sheriff of said county and of certain employees in the jail in said city.

410. Introduced by Mr. Husted :

Concurrent resolution requesting congress to establish by law such just and equitable fees for the port of New York and for all ports of entry in the United States, etc.

411. Introduced by Mr. Clarke :

An act in relation to the payment of interest on certain certificates of indebtedness of the late town of Morrisania, Westchester county, and authorizing the audit and payment thereof.

412. Introduced by Mr. Maher :

An act to regulate the manner of contracting auditing and paying certain charges against the county of Albany.

413. Introduced by Mr. Becker :

An act to amend chapter 298 of the Laws of 1883, entitled "An act to provide for the government of the city of Albany."

414. Introduced by Mr. Van Allen :

An act to authorize the Board of Fire Commissioners of the city of New York to inquire into and determine the claims of George Nunn to be placed upon the pension roll of the fire department of said city.

415. Introduced by Mr. Clinton :

An act to provide for a revision of the charter and ordinance of the city of Buffalo.

416. Introduced by Mr. Higgins :

An act to provide for the erection or purchase of municipal buildings in the city of New York and to provide for the removal of public buildings therein rendered unnecessary by such erection or purchase.

417. Introduced by Mr. Becker :

An act to amend chapter 298 of the Laws of 1883, entitled "An act to provide for the government of the city of Albany."

418. Introduced by Mr. Hooley :

An act to amend the charter, and acts amendatory, of the city of Troy.

419. Introduced by Mr. Littlejohn :

An act to supply the city of Oswego with pure and wholesome water.

G. O.

420. Introduced by Mr. Earl:

An act to authorize the election of an additional justice of the peace of the city of Brooklyn and to create an additional district therein.

421. Introduced by Mr. Maher:

An act to provide for the care, transportation and commitment, and the payment therefor of lunatics, idiots, persons of unsound mind, deaf mutes, orphans, and paupers, the expense of whose maintenance and transportation is a charge upon the county of Albany, and to define the duties of the superintendent of the alms house in the city of Albany.

422. (Senate.) Introduced by Mr. Jacobs:

An act authorizing the city of Brooklyn to convey certain lands defective in title.

423. Introduced by Mr. House:

An act to extend the length of the pier in the North or Hudson river between West Forty-first and Forty-second streets, New York city.

424. Introduced by Mr. Butler:

An act to ratify and confirm certain grants made in pursuance of section three of chapter 702 of the laws of 1873.

425. Introduced by Mr. Earl:

An act to reduce the rates of ferriage on certain ferry routes between the cities of New York and Brooklyn and to establish rates of ferriage thereon and regulate the running of said ferries

426. Introduced by Mr. Price:

An act to authorize the village of Jamestown to raise money to pay for water supplied for its use, in extinguishing fires in said village.

427. Introduced by Mr. Van Duzen:

An act to amend chapter 513 of the Laws of 1880, entitled "An act to regulate the licensing of physician and surgeons.

428. Introduced by Mr. Clarke:

An act prohibiting the sale or giving away of cigarettes to any minor under the age of fourteen years.

429.

An act to improve the public health by prohibiting the manufacture of cigars and preparation of tobacco in any form in tenement houses in certain cases and regulating the use of tenement houses in certain cases.

430. Introduced by Mr. Moore:

An act to authorize the State board of claims to hear and determine certain claims against the State.

431. Introduced by Mr. Moore :

An act to authorize the State board of claims to hear and determine certain claims against the State.

432. Introduced by Mr. Clinton :

An act to amend chapter 336 of the Laws of 1883, entitled "An act to authorize the selection, location and appropriation of certain lands in the village of Niagara Falls for a State Reservation and to preserve the scenery of the Falls of Niagara."

433. Introduced by Mr. Odell :

An act to amend an act entitled "An act making appropriation for the several judicial district libraries," passed May 26, 1870.

STATE OF NEW YORK.

No. 118.

IN ASSEMBLY,

MARCH 12, 1884.

REPORT

OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton submitted the report from the sub-committee of the whole, which was laid on the table and ordered printed.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 323, G. O. 318, entitled "An act to legalize and confirm the purchases, sales, leases, mortgages and conveyances made in the name of the Chautauqua Lake Sunday School Assembly, and in the name of the Chautauqua Assembly, and relieve the said corporation from the embarrassment created by section 3 of chapter 319 of the Laws of 1848, as amended by chapter 487 of the Laws of the State of New York, passed June 30, 1853," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Beckwith	Priddy
Earl	Haskell	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 229, G. O. 226, entitled "An act to change the corporate name of 'The German-American Loan and Trust Company of the city of New York,' to the 'Title Guarantee and Trust Company,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Beckwith	Priddy
Earl	Haskell	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 284, G. O. 281, entitled "An act to amend chapter 319 of the Laws of 1848, entitled 'An act for the incorporation of benevolent, charitable, scientific and missionary societies,' and the several acts amendatory thereof," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Ely
Kittle	Beckwith	Priddy
Earl	Haskell	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 135, G. O. 128, entitled "An act to enable corporations whose object is the education of children, including those unable to pay therefor, and the visiting and assisting the poor, to establish an educational department of such corporations," reported in favor of the passage of the same with an amendment, by striking out all after the enacting clause and inserting as follows :

SECTION 1. Any corporation heretofore created or hereafter to be created by special act of the Legislature of this State, whose object is the education of children, including those unable to pay therefor, and the visiting and assisting the poor, shall be capable of taking and holding any property, real or personal, by gift, grant, bequest or devise, for the purposes of its incorporation, to an amount not exceeding \$200,000, and when any such corporation shall have acquired property, amounting in the aggregate to not less than \$60,000, the board of trustees of such corporation may, by resolution passed at a regular meeting thereof, appoint twelve persons of full age, citizens of the United States and of the State of New York, whom they may desire to manage and direct the educational department of said corporation. The president of said corporation in its behalf, and the persons so appointed, may thereupon make and acknowledge, before any officer authorized to take the acknowledgment of deeds in this State, a certificate in writing, in which shall be stated the name and object of such corporation and the special act by which the same was created, the names of the persons appointed as aforesaid, the date of making such appointment, the title under which the said educational department will be known in law, and the county in which it is to be conducted.

§ 2. Upon filing the aforesaid certificate in the office of the Secretary of State, and a certified copy thereof in the office of the clerk of the county in which the business of the said educational department is to be conducted, and the persons named in said certificate and their successors in office, shall have power to make such by-laws as they shall deem proper for the management of said department, and to prescribe the course of study and discipline to be pursued and observed by the students attending the schools conducted by said corporation, and when any such student shall have completed the course of study prescribed by said educational department, provided the same shall be

the usual course prescribed in the literary colleges of this State, and shall, upon examination, be found competent in judgment of the majority of the members thereof, it may grant to such student the usual literary degrees, and as evidence thereof issue a suitable diploma in the name of, and under the seal of said department and the signatures of the president and members thereof.

§ 3. Seven members of said educational department shall constitute a quorum for the transaction of business, and said department shall hold at least two meetings annually, and shall make, on or before the 15th day of July in each year, a report to the Board of Regents of the University of the State of New York, showing the number of students attending the schools aforesaid, the number of classes or grades into which such students are divided, the course of study pursued by each of such classes or grades, and such other facts concerning said schools or their management as the said Board of Regents may by resolution require; and every educational department organized under this act shall be subject to the visitation of the said Board of Regents.

§ 4. If, at any time, the corporation making the designation aforesaid shall deem it for the best interests of the educational department of such corporation that any member of said department shall be removed from such office, it may, by resolution passed at a regular meeting of such corporation, revoke the appointment of such person, and upon filing a copy of such resolution in the office of the Secretary of State, and in the office of the clerk of the county in which the said educational department is conducted, such person shall thereupon cease to be a member of said educational department, and when any vacancy shall occur in said department by reason of the death, resignation or removal from office of any member thereof, such vacancy shall be filled by resolution passed by the board of trustees of said corporation at its next regular meeting; such resolution together with the acceptance of such appointment by the person therein designated shall be filed in the office of the Secretary of State, and in the office of the clerk of the county in which said educational department is conducted.

§ 5. This act shall take effect immediately.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Beckwith	Priddy
Earl	Haskell	Clinton — 10.
Forsyth		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 196, G. O. 190, entitled "An act to amend an act entitled 'An act relative to certain assessments for sewers in the city of Brooklyn,' passed May 26, 1881," reported in favor of the passage of the same with amendments, as follows:

Section 1, line 1, strike out the words "the act," and insert "chapter 371 of the Laws of 1881;" lines 2 and 3, strike out the words "passed May 26, 1881;" also with the title amended so that it wil₁

read, "An act to amend chapter 371 of the Laws of 1881, entitled 'An act relative to certain assessments for sewers in the city of Brooklyn.'"

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Forsyth	Geddes	Clinton — 9.

For the Negative.

Earl	Priddy — 2.
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Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 180, G. O. 186, entitled "An act to amend chapter 341 of the Laws of 1882, entitled 'An act to create a board of commissioners of sewers of the city of Buffalo, to define their powers and duties and to provide means for the construction and maintenance of certain sewers in the city of Buffalo,'" reported in favor of the passage of the same with amendments, as follows:

Section 1, line 5, after the word "Buffalo," insert "as amended by chapter 292 of the Laws of 1883"; lines 7 and 8, strike out the words "a point in Niagara river, north of the water-works, and south of the line of"; line 9, strike out the words "including a tunnel to be used as an inlet to the said sewer," and insert "together with an outlet"; line 11, strike out the words "well hole in the westerly end of." and change the word "tunnel" to "outlet"; also with an amendment to the title by inserting at the end thereof the words "as amended by chapter 292 of the Laws of 1883."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 255, G. O. 256, entitled "An act to further amend chapter 482 of the Laws of 1875, entitled 'An act to confer on boards of supervisors further powers of local legislation and administration, and to regulate the compensation of supervisors,'" reported in favor of the passage of the same with amendments, as follows:

Section 1, line 28, strike out the words "investigation or other;" line 30, strike out the words "his actual expenses incurred when such," and insert "mileage once going to and returning from the place where the;" lines 30 and 31, strike out the words "five miles or more distant from where he shall reside."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 145, G. O. 142, entitled “An act to regulate the sale and use of oleomargarine, butterine, suine, or any substance or article which may or can be used as a substitute for butter or cheese, and to prevent any such substance or article being sold, disposed of, or used, except by its true name, and to prevent the adulteration of butter and cheese,” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Earl	Allen	Ely
Forsyth	Geddes	Priddy
Childs	Haskell	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 312, G. O. 305, entitled “An act to amend and supplement chapter 292 of the Laws of 1865, entitled ‘An act to provide for the promotion of public health and for draining and reclaiming overflowed and wet lands adjoining the Indian river in the counties of Jefferson and St. Lawrence,’” reported in favor of the passage of the same with an amendment, as follows :

Section 1, line 2, after the word “sixty-five” insert “entitled an act to provide for the promotion of public health and for draining and reclaiming overflowed and wet lands adjoining the Indian river in the counties of Jefferson and St. Lawrence.”

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 126, G. O. 117, entitled “An act to provide for the labeling of any barrel, keg, cask, bottle or other vessel, containing fermented liquors, and to prevent the adulteration of the same,” reported in favor of the passage of the same with an amendment to the title, as follows :

In line 2, after the word “containing” insert “brewed or.”

Said bill was ordered reported by the following vote :

For the Affirmative.

Forsyth	Allen	Ely
Childs	Geddes	Priddy
Beckwith	Haskell	Clinton — 9.

For the Negative.

Dayton	Kittle — 2.
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Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 165, G. O. 167, entitled “An act for the relief of Phineas Kent and John Andrus, and to authorize the Board of Claims to hear the same,” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 324, G. O. 319, entitled “An act to incorporate the Young Men’s Christian Association of the city of Binghamton,” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Priddy
Earl	Allen	Clinton — 11.
Forsyth	Geddes	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 203, G. O. 200, entitled “An act to amend chapter 162 of the Laws of 1873, entitled ‘An act to incorporate the Nyack Water-works Company,’” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 244, G. O. 244, entitled "An act establishing the lines of Mott avenue in the twenty-third ward of the city of New York," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 150, G. O. 148, entitled "An act to extend the operation and effect of chapter 40 of the Laws of 1848, entitled 'An act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes,'" reported in favor of the passage of the same, with amendments, as follows :

Section 1, line 3, strike out the words "the act," and insert "chapter 40 of the Laws of 1848 ;" lines 4 and 5, strike out the words "passed February 17, 1848."

Said bill was ordered reported by the following vote :

For the Affirmative.

Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 11.
Childs	Haskell	

For the Negative.

Dayton — 1.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 139, G. O. 134, entitled "An act to amend chapter 244 of the Laws of 1871, entitled 'An act to incorporate the Ithaca fire department,'" reported in favor of the passage of the same with an amendment, as follows :

Section 1, line 14, after the word "department" insert "The said board of trustees shall elect three of their number to serve as inspectors of such election. The polls of said election shall be open from the hours of 2 P. M. until 9 P. M."

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 209, G. O. 218, entitled "An act to

amend an act entitled 'An act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes,' passed February 17, 1848, reported in favor of the passage of the same with amendments, as follows:

Section 1, line 16, strike out the words "subsequent to" and insert "between."

Line 17, after the word "sixty-five" insert "and the first day of July, 1865."

Line 26, after the word "commence" insert "or continue."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Forsyth	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 89, G. O. 82, entitled "An act to authorize the common council of the city of Schenectady to discontinue a portion of Liberty street, in the city of Schenectady, for the purpose of a railroad depot," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Forsyth	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 309, G. O. 302, entitled "An act providing for the election and compensation of coroners in the county of Onondaga, and for post-mortem examinations in coroner's cases in said county," reported in favor of the passage of the same with amendments, as follows:

Section 2, line 1, change the word "coroners" to "coroner," and after the word "of" insert "one thousand." Add at the end of section 2, as follows: "Said coroner shall keep his office in the county clerk's office building, in the city of Syracuse in said county."

Section 3, line 4, strike out the words "of any one;" line 5, change the word "coroners" to "coroner."

Section 4, line 6, strike out "a" and insert "the."

Section 6, line 1, change the word "coroners" to "coroner;" line 4, strike out the word "them" and insert "him."

Also an amendment to the title in lines 1 and 2, change the word "coroners" to "a coroner."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 93, G. O. 86, entitled "An act to amend an act entitled 'An act for the preservation of moose, wild deer, birds, fish and other game,' passed June 20, 1879," reported in favor of the passage of the same with amendments, as follows:

Section 1, lines 1 and 2, strike out the words "said act, as amended by chapter 531 of the Laws of 1880," and insert "of chapter 534 of the Laws of 1879, entitled 'An act for the preservation of moose, wild deer, birds, fish and other game;'" lines 17, 18 and 19, strike out the words "Black lake, in the county of St. Lawrence, St. Regis river, Grass river and Racket river below the line of the Ogdensburgh and Lake Champlain railroad;" line 36, after the word "amended," insert "provided further that in Black lake, Mud lake and Yellow lake, in St. Lawrence county, bullheads, eels, suckers, catfish and pickerel may be killed with a spear except in the months of March, April and May;" also with the title amended so that it will read "An act to amend chapter 534 of the Laws of 1879, entitled 'An act for the preservation of moose, wild deer, birds, fish and other game.'"

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle .	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 254, G. O. 255, entitled "An act to authorize the supervisor of the town of Thompson, in the county of Sullivan, to borrow money to pay interest on certain bonds of said town, and to pay the expenses of carrying into effect the provisions of chapter 256 of the Laws of 1883," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 249, G. O. 250, entitled "An act to legalize and confirm the official acts of notaries public," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 143, G. O. 139, entitled “An act supplementary to an act entitled ‘An act to incorporate the Genesee Camp Ground Association,’ passed April 6, 1857,” reported in favor of the passage of the same with amendments, as follows:

Section 1, line 4, after the word “by” strike out the remainder of the section, and insert “chapter 252 of the Laws of 1857, entitled ‘An act to incorporate the Genesee Camp Ground Association;’” the title was also amended so as to read “An act supplementary to chapter 252 of the Laws of 1857, entitled ‘An act to incorporate the Genesee Camp Ground Association.’”

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 92, G. O. 85, entitled “An act to amend chapter 534 of the Laws of 1879, entitled ‘An act for the preservation of moose, wild deer, birds, fish and other game,’” reported in favor of the passage of the same with an amendment, by striking out the word “Herkimer” in line 7 of section 1.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Allen	Ely
Earl	Geddes	Clinton — 9.

For the Negative.

Beckwith — 1.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 316, G. O. 309, entitled “An act to authorize the town of Morristown, St. Lawrence county, to sell their railroad stock and pay their indebtedness,” reported in favor of the passage of the same with an amendment. In line 4 of section 1, change the word “eighty” to “fifty.”

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Geddes
Kittle	Beckwith	Haskell
Earl	Allen	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 45, G. O. 141, entitled "An act to further amend chapter 121 of the Laws of 1833, entitled 'An act to incorporate the New York Protestant Episcopal City Mission Society,'" as amended by chapter 173 of the Laws 1866, reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Ely
Kittle	Beckwith	Priddy
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 144, Int. No. 80, entitled "An act in relation to the collection of taxes in Monroe county, and to authorize and provide for the sale of property for unpaid taxes in said county," reported in favor of the passage of the same, without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Haskell
Kittle	Allen	Ely
Earl	Geddes	Clinton — 10.
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 118, G. O. 322, entitled "An act to amend the act entitled 'An act for the incorporation of benevolent, charitable, scientific and missionary societies,' passed April 12, 1848," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Kittle	Beckwith	Ely
Earl	Allen	Priddy
Childs	Geddes	Clinton — 9.

For the Negative.

Dayton	Haskell — 2.
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Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 102, G. O. 32, entitled "An act to authorize the board of education of the Baldwinsville union free school district to borrow money," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 101, G. O. 137, entitled "An act to amend chapter 161 of the Laws of 1869, entitled 'An act to incorporate the Deaconess Institution of the Evangelical Lutheran Church,' as amended by chapter 440 of the Laws of 1875," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 130, G. O. 364, entitled "An act for the relief of persons who performed the duties of janitors of district courts in the city of New York, between September 30, 1878, and May 1, 1880," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Allen	Priddy
Forsyth	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 48, G. O. 222, entitled "An act to authorize the Home for the Aged of the Little Sisters of the Poor of the City of New York to acquire and hold real and personal estate for benevolent and charitable purposes," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Haskell
Kittle	Beckwith	Ely
Earl	Allen	Priddy
Forsyth	Geddes	Clinton — 12

STATE OF NEW YORK.

No. 119.

IN ASSEMBLY,

MARCH 12, 1884.

ONE HUNDRED AND THIRTEENTH

ANNUAL REPORT OF THE STATE OF THE NEW YORK
HOSPITAL AND BLOOMINGDALE ASYLUM.

To the Legislature of the State of New York :

The Governors of the New York Hospital respectfully present their Annual Report of the State of the Institutions under their charge for the year 1883, as required by law.

DAVID COLDEN MURRAY,

Secretary.

[Assem. Doc. No. 119.]

1

REPORT.

The institutions under the management of the governors of this society, as has been the case for past years, are the New York hospital, situated in Fifteenth and Sixteenth streets, near the Fifth avenue; the Bloomingdale asylum for the care of insane patients, occupying the grounds extending from One Hundred and Thirteenth to One Hundred and Twentieth street, and from the Boulevard to the Tenth avenue; and the House of Relief at No. 160 Chambers street, generally known as the Chambers street hospital, for the relief and temporary care of cases of emergency, principally surgical.

The governors are able to report that all these institutions are in good order, and have been efficiently and successfully administered during the year just closed. Their efforts to promote this end have been ably and faithfully seconded by the heads of the various departments, and by the medical and surgical resident staffs, while the eminent professional gentlemen whose gratuitous services have so largely promoted the advancement of science and the cause of humanity, have continued to render those services with unabated zeal.

The financial condition of this corporation on the 31st December, 1883, as compared with that at the close of the previous year, was as follows :

On the 31st of December, 1882 :

Due on bonds of the society of the New York hospital.....	\$370,000 00	
Temporary loan.....	217,000 00	
	<hr/>	\$587,000 00
Deduct balance in Bank of Commerce to the credit of the hospital.....	\$1,267 10	
Deduct balance in Bank of the Metropolis to the credit of the hospital.....	1,000 00	
Deduct balance in Bank of America to the credit of the asylum.....	13,600 76	
Deduct balance in hands of Charles H. Nichols, medical superintendent of the asylum.....	3,394 80	
Deduct balance in hands of the superintendent of the House of Relief.....	250 00	
	<hr/>	19,512 66
		<hr/>
		\$567,487 34
		<hr/>

On the 31st of December, 1883 :

Due on bonds of the society of the New York hospital.....	\$370,000 00	
Temporary loans.....	263,000 00	
	<hr/>	\$633,000 00
Deduct balance in Bank of Commerce to the credit of the hospital.....	\$702,92	
Deduct balance in Bank of the Metropolis to the credit of the hospital.....	1,000 00	
Deduct balance in Bank of America to the credit of the asylum.....	7,450 00	
Deduct balance in the hands of Charles H. Nichols, medical superintendent of the asylum	1,694 28	
Deduct balance in Bank of Commerce to the credit of the House of Relief.. ..	250 00	
	<hr/>	11,097 20
		<hr/>
		\$621,902 80
		<hr/>

Showing an increase of the debt during the year of \$54,415.46.

In the appendix will be found the report of the Committee on Accounts, showing the receipts and expenditures from all sources and on all accounts, as also particular statements showing the items of the disbursements for each of the three establishments.

At the hospital in Fifteenth street the number of patients treated in the wards was 3,134, while the average number under treatment was 139, being an almost accurate repetition of the figures of the previous year. In fact, the demand upon the accommodations afforded by the hospital having long since reached its capabilities, there is not much room for variation in these statistics. The very large ratio of the total treated to the average number of patients in the wards (22 to 1) which continues to be a peculiar feature of this hospital, shows the activity of the service, and goes far in explaining the large per diem cost of maintenance as shown by the accounts.

The sanitary condition of the building continues to be satisfactory, no cases of hospitalism having occurred in the surgical practice, and the results of treatment have been satisfactory. These results are carefully and accurately stated in the tables of statistics printed in the appendix, and a careful study of them in comparison with those of twenty years ago will show the great advance in modern surgery, particularly when practiced in connection with improved hospital construction, careful nursing, perfect cleanliness, and all possible appliances for the comfort of the patient.

The out-patient department presents no new features, excepting the continued increase in the number of applicants for its benefits, the number of new patients having risen to 4,947, and the number of visits to 27,670, against 4,499 and 25,718 the previous year.

The training school for nurses continues in successful operation. As stated in former reports, this school was one of the earliest estab-

lished in the country, and presents unusual advantages to young women contemplating the adoption of that career for their future lives. The course of training consists of eighteen months' continuous practice and instruction at the bedside under the direction of an efficient principal, regular lessons in cooking by an expert, and courses of lectures to the pupils by physicians of experience. Notwithstanding the establishment of numerous other schools, the demand for trained nurses in the community keeps pace with the supply, and the services of the graduates of this school are in constant requisition. The total number of nurses graduated up to the present time has been 68, of whom a large proportion are practicing their profession in the city, and are registered at the hospital, where applications for their services are responded to. Many of the graduates of this school, however, are called upon to act as heads of newly established schools, or to superintend the nursing department of hospitals. This branch of the hospital service was carried on at an expense of \$7,206.28.

In the pathological department instruction has been given as formerly, to practitioners as well as students, in the laboratory and autopsy room. The number of autopsies made at the hospital and House of Relief amounted to 239. The valuable cabinet in the administration building has been increased by the number of 100 specimens, and now contains 1,963 objects, carefully preserved and catalogued. The additions to the cabinet are derived principally from the operating and autopsy theaters, but many of them, and recently a larger proportion, are the donations of professional men not connected with the hospital, by whom the great value and usefulness of the cabinet are more and more appreciated. The cost of this department, which is supported by the income of the "Ray Fund," was \$3,123.29.

The hospital library, which was established in the year 1796, has annually increased in magnitude and value under the fostering care of the governors, and the intelligent and unremitting labors of Dr. John L. Vandervoort, the librarian, who has held the office for an uninterrupted period of forty-five years. It now contains upwards of fourteen thousand volumes, confined entirely to medicine and surgery and the collateral branches of science relating thereto. The library is in constant receipt of a large number of foreign and domestic periodicals and transactions, and thus enables the busy practitioner as well as the student of medicine, to whom its doors are freely open, to become informed of the progress of medical knowledge.

At the House of Relief, or Chambers street hospital, the number of patients treated was 2,368, of whom 2,100 were treated only in the reception ward, and were discharged, transferred to other hospitals, or died immediately; the temporary care of cases of emergency being the chief feature of this establishment. The number of cases treated in the out-patient department was 11,627, and the number of ambulance calls reached the large number of 2,345.

As above stated, 3,134 patients were treated in the hospital during the year, remaining under care for an aggregate period of 7,290 weeks. Of these 697 were non-paying patients, and the amount charged to the Charity Fund for their maintenance was \$38,219.98.

The service at the House of Relief is absolutely free, and this establishment has been maintained at an expense of \$24,550.13.

At the Bloomingdale asylum the number of patients admitted was 141, and the total number treated during the year, 364. The great number of admissions to this institution has taxed its resources to the utmost, and it seems probable that it will be unable to respond to the demands upon it in the near future, and until means can be provided for the extension of its accommodations. The annual report of the medical superintendent, Dr. Charles H. Nichols, will be found in the appendix, and is referred to as presenting full and accurate particulars of the results of treatment and other information. About two-thirds of all the patients treated at Bloomingdale pay either nothing or an amount more or less below the cost of maintenance, the deficiency in these cases having amounted to \$30,634.72. This deficiency was provided for in part by the avails of the John C. Green Memorial Fund, and in part by the higher rates paid by the remaining one-third of the patients, but even with these aids the receipts of the institution fell short of the expenses by the sum of \$7,851.28.

From the foregoing it will be seen that the governors are applying all the means at their disposal to the carrying out of the benevolent and educational objects of the society; and while its facilities are ample for a great extension of its sphere of usefulness, it is much to be regretted that its limited resources must compel the governors to postpone the attainment of such desirable ends.

WM. H. MACY,

President.

D. COLDEN MURRAY,

Secretary.

NEW YORK, *February* 5, 1884.

REPORT OF THE MEDICAL SUPERINTENDENT.

To the Governors of The New York Hospital :

GENTLEMEN. -- The following is a tabular summary of the operations of this department of the Hospital for the year 1883 :

	MEN.	WOMEN.	TOTAL.
The number of patients under treatment on the first day of January, 1883, was.....	105	118	223
Admitted in the course of the year.....	64	77	141
Whole number treated in the year.....	169	195	364
The discharges were: Recovered.....	15	21	36
By death.....	12	6	93
Unimproved.....	10	17	27
Improved.....	23	16	18
Remaining under treatment December 31, 1883.....	60	60	120
The average number under treatment, was.....	107.317	127.781	235.098
The lowest number, which was in January, was.....	103.	118.	221.
The highest number, which was in November, was.....	109.	138.	247.

ADMISSIONS.

Three persons only, all women, were discharged and readmitted in the year, reducing the number of individuals treated to three hundred and sixty-one.

Of those received, fifteen patients, two men and thirteen women, had been in the institution once before ; one man had been in it twice, and one three times before. Of the first readmissions, four, all women, had been discharged recovered ; eight, one man and seven women, improved ; three, one man and two women, unimproved. Of the second or other readmissions, one man had been twice discharged recovered, and one man, a case of general paresis with partial remissions, had been discharged three times. Ten patients, three men and seven women, were readmitted who had not recovered from their first attacks, and two women appear to have recovered after their discharge.

The longest continuous absences preceding their present admissions were in the cases of one man, one year and three months ; one woman, thirty-three years. The shortest, in the case of one man two months and five days, and of one woman nine days.

One hundred and twenty-two of the admissions, fifty-nine men and sixty-three women — eighty-six per cent of the whole number admitted — were first attacks, one hundred and twelve of which, fifty-six men and fifty-six women, were first admissions to Bloomingdale.

In carefully estimating the prognosis of the cases admitted, fifty-six, eighteen men and thirty-eight women, were classed as *favorable* ; sixty-three, thirty men and thirty-three women, as *unfavorable* ; twenty-two, sixteen men, including thirteen cases of paresis, and six women as *incurable*.

Forty-one patients were admitted three months or less after the first symptoms of mental disease were noticed ; thirteen between three and six months ; twenty between six months and one year, and seventy-seven more than one year.

DISCHARGES.

Thirty-six persons, fifteen men and twenty-one women, appeared to make complete recoveries this year, which were thirty per cent of the discharges, including deaths. No person is reported as having recovered more than once.

Twenty-seven, fourteen men and thirteen women, recovered from first attacks ; four, one man and three women, recovered from second attacks ; four women from third attacks, and one woman from a fourth attack.

Twenty-five, eight men and seventeen women, recovered from *mania* of the various types ; eleven, seven men and four women, from *melancholia*.

The average duration of the treatment of all the cases that recovered was six months and thirteen days. Of the men it was four months and eleven days, and of women it was eight months and nineteen days. The shortest periods of treatment were twenty-one days of one man, and twenty-two days of one woman ; the longest were six months and fifteen days of one man, and four years, two months and six days of one woman. The disease in the cases of recovery was reported to have existed an average of three months and twenty days prior to admission, the average having been exactly the same for both sexes. The average time from the reported inception of the disease to recovery, was ten months and three days ; in the men eight months and one day, and in the women twelve months and nine days.

Thirty-eight patients, twenty-three men and fifteen women, were discharged *improved* ; and twenty-eight, ten men and eighteen women, as *unimproved*. Ten of the improved cases bade fair to recover under sufficiently protracted treatment.

DEATHS.

Eighteen patients, twelve men and six women, died. Five men died of

the *general paralysis of the insane*; four, three men and one woman, of *exhaustion*, three in cases of acute mania one in a case of acute melancholia; two women of *marasmus*, accompanying acute melancholia; two, one man and one woman, of *pneumonia*, supervenient in one case to the exhaustion of acute mania, and in the other of chronic dementia secondary to acute mania; one woman of *colliquative diarrhœa* and another of *pulmonary tuberculosis*, both in acute melancholia; one man of *epilepsy*, in a case of chronic dementia; one man by *drowning*, in a case of chronic mania running into dementia, and one man of *mitral stenosis*, in a case of acute melancholia.

The remarkable fact that one more than one-half of the deaths occurred in the acute stage of mental aberration, appears to require a word of explanation. One young woman died of exhaustion of acute disease of recent invasion. In the other deaths in acute cases, one-half of the whole number, the exhaustion of the vital forces long preceded and mainly caused the insanity. The essential cause of death was chronic, though the mental disorder was acute.

The death in the acute cases occurred after they had been under treatment an average period of two months and twenty-one days. Two were in the house respectively three and five days, and one as long as eight months and fifteen days. Of the five patients that died of the general paralysis of the insane, the shortest period that elapsed between the original admission and death was eight months and twenty-nine days; the longest lacked only one day of four years; the average was two years, seven months and seven days. As was remarked last year, the average duration from inception to death in cases of paresis is at least one year longer than their hospital life.

The three deaths in chronic cases other than paretics, took place, one in one year and fifteen days; one in one year, six months and five days, and one in two years, one month and three days, after admission. I much regret that one of these cases was that of an amiable young gentleman, who was drowned while bathing at the seaside under what was considered the safest conditions. The coroner of the locality pronounced it a case of accidental drowning, probably following cramp. It is my own belief that he had either an epileptic or apoplectic seizure. There was not the slightest ground for suspicion of suicide.

The deaths were nearly five per cent of the whole number of persons treated. They were a little rising, seven per cent of the men and three per cent of the women.

MECHANICAL RESTRAINT.

No mechanical restraint was used in the course of the year. One patient only, a man of powerful frame and courageous will, suffering from acute mania and exhibiting the strongest tendency to personal violence, was secluded the most of the time for about three months, as the means best calculated to husband his strength and secure the safety of others. The varying requirements of treatment are strikingly illustrated by the practicability of refraining from the use of mechanical restraint for a whole year, and the necessity of resorting to it in two different cases between the close of the year and the presenta-

tion of this report, to prevent self-mutilation, which could not be prevented by the personal restraint of one or many attendants without a constant struggle that was most exhaustive and injurious to the patients.

THE CASE DE LUNATICO INQUIRENDO.

Having referred last year to a patient who had been declared sane by a commission and jury *de lunatico inquirendo*, against very strong, and every way competent testimony to the contrary, and who, after the verdict, had returned to the Institution, where he persisted in remaining, I should this year inform you of the sequel of that case. The patient (a man, as you will recollect, of respectable character and inventive genius) could at no time be persuaded to leave Bloomingdale, and he was permitted to remain until February 19, 1883, about seven months after the inquiry and verdict, when his delusions became more active and he began to hint at self-vindication by homicide and arson. He was then arrested for trespass, and having been sent by the magistrate to the Bellevue Hospital for examination as to his state of mind, by physicians connected with the public service, he was found to be insane and sent to another institution, where he has since committed suicide and closed an ample vindication of the truth, if not the ability and conscientiousness, of the discredited testimony at the inquiry.

EXCURSIONS AND COUNTRY RESIDENCES.

Excursion parties of both sexes, varying in number from ten to forty, including at least one officer and the requisite force of attendants, were made semi-weekly during the summer and autumn months either to one of the more quiet sea-side resorts or to the farm at White Plains; and with the single exception already recorded, these parties of pleasure were not attended by any untoward event. They conferred a great amount of pleasure and healthful benefit upon those who participated in them -- an amount that those who are constantly in the midst of busy life and affairs can neither estimate nor realize. To several patients, whose condition for long periods in the past led to their almost unbroken confinement to the house, these days abroad have not only recalled old associations and pleasures, but added to those with which they were formerly familiar. One accomplished lady of advanced age, but still active and possessing much capacity for the enjoyment of society and scenery, rode in a railway car for the first time in her life in going to the farm twenty miles away.

The view here entertained of the importance and practicability of out-door life in suitable weather, will, I think, be attested by members of your honorable board, whose members at unannounced official visits to the institution, have several times found the apartments of patients entirely deserted, every patient being in the open air.

Twelve patients, four men and eight women, accompanied by their attendants, were boarded in private families in the country, three of them in the family of the farmer at White Plains, for periods varying from a few weeks to three months. The families that received the

patients had no other boarders at the time. This measure of treatment was first undertaken last year, and then proved so satisfactory that it has been continued with respect to a larger number of patients this year, not only without unfavorable event at any time, but with manifest advantage to every patient, from the change of scene, air and association. It evidently promoted the recovery of the convalescents of whom there were five, and the improvement and comfort of the remaining seven less favorable cases. It is an interesting fact that ten of the twelve, though well satisfied with their accommodations while away, were glad to return to the institution. One woman completed her recovery and preferred to go directly home from her summer resort, and one man thought he would like to purchase a farm in the neighborhood where he had been staying and make it his permanent place of residence.

ATTENDANTS.

Applications are occasionally made for attendants whose services are wanted at the homes of patients, and I have regretted that I have not often been able to furnish them, as it is rarely the case that the proper discharge of the obligations here assumed does not require the constant services of all our best attendants. The younger and partially trained attendants lack the judgment and decision necessary to have the care of the insane at their homes, and would neither be of much service to the patient nor reflect credit upon the institution. With rare exceptions, the best trained and most capable and trusty attendants do not care to exchange the agencies and system of their service here for chance employment in what are called private cases. As a rule, only second or third-rate attendants who are impatient of the discipline and order of institution service, or incapable, or have graver defects of character, resort to that inconstant, not to say precarious, means of a livelihood. Attendants are, as a rule, poor nurses of the general sick; and general nurses are poor attendants upon the insane. The members of neither vocation have the training and practice necessary to become proficient in the duties of the other. For reasons that will readily be inferred from what I have just said, there is a great want of available skill in the personal care of the insane during the periods that they are from necessity or choice treated at their homes, and it has appeared to me that the most practicable way in which that want could be supplied would be to add three or six months in proper institutions for the insane to the curriculum of the training schools for nurses. Nurses with such an addition to the training that is now usual, would be qualified to nurse any case of sickness, whether surgical, medical or mental, in which their services might be demanded. Such comprehensive qualifications would be a great convenience to families and physicians, and by somewhat enlarging the sphere of the service of nurses would add something to the value and constancy of their employment.

With the approval of the asylum committee, I would be willing to undertake to give the graduating nurses of the hospital three or six months' training and service at Bloomingdale. If such an arrangement should be entered into, I do not doubt that the asylum would

gain something from the instruction and methods the nurses would bring with them from the hospital, and should hope that the nurses would derive a full equivalent for the time they might spend in the asylum.

RECEIPTS AND EXPENDITURES.

Receipts.

Brought from last annual statement.....	\$16,995 56
For board and treatment of patients.....	117,120 83
For clothing and personal expenses of patients.....	7,092 30
For articles sold at Bloomingdale	834 95
For articles sold at White Plains.....	267 16
For telephonic and telegraph messages.....	8 79
For miscellaneous sources.....	80 76
	<hr/>
	\$202,400 35

Expenditures.

For house and other supplies.....	\$98,358 00
For salaries and wages.....	70,392 60
For clothing and personal expenses of patients.	9,015 46
For board and treatment money refunded...	7,242 22
For board of patients in country.....	1,209 72
For telegraph and telephonic expenses	268 80
For materials for repairs and improvements.	6,769 27
	<hr/>
	193,256 07
	<hr/>
Balance carried to next annual statement	\$9,144 28
	<hr/> <hr/>

In the foregoing statement of the gross expenditures in the year, are included direct payments on account of the farm at White Plains of \$5,327.75 ; \$2,100.72 for superintendence and labor ; \$1,417.22 for seeds, fertilizers, hay and feed ; \$676.34 for farm implements, including double wagon and harness ; \$207.35 for stock ; \$500.24 for furniture ; \$175.48 for provisions, and \$250.40 for materials and labor on house and other accounts. In addition to the above, provisions for the farm hands which cost \$611.04 were furnished from the stores at Bloomingdale.

The yield of the farm in 1883, and the estimated market value of the crops at the farm and of articles sold, were :

Hay, 119 tons, at \$15	\$1,785 00
Oats (unthreshed), 41 tons, at \$16.....	656 00
Corn, fodder, 60 tons, at \$5.....	300 00
Corn, table, 3,138 dozen, at 12½ cts.....	392 25
Corn, shelled, 442 bushels, at 75 cts.....	331 50
Cabbages, 7,700 heads, at 8 cts	616 00
Apples, 61½ bushels, at \$1.....	61 50
Potatoes, 3,146 bushels, at 50 cts.....	1,573 00
Pears, 13½ barrels, at \$3.....	40 50
Onions, 20 bushels, at \$1	20 00
Beets, 30 bushels, at 75 cts.....	22 50

Turnips, 25 bushels, at 50 cts	\$12 50
Board of patients and attendants.....	150 00
Pasture and feed of Bloomingdale stock	150 00
Stone — leave to quarry.....	208 61
Miscellaneous.....	58 55
	<hr/>
	\$6,377 91

showing an excess of values and receipts over all expenditures on account of the farm of \$439.12. It should be observed that the market values of farm products, particularly of potatoes with one exception the most valuable yield of the season, have all been low this year, and that there was the considerable expenditure of \$1,634.33 for stock, farm implements, furniture and repairs of house. The stock purchased is of a character that will perpetuate itself. With care, most of the farm implements and furniture will last many years. The repairs to the house were substantial and durable of their kind.

The number of weeks' board and treatment furnished to patients was 12,258 $\frac{6}{10}$, and the average expenditure per patient was \$15.17, or seven cents more per week than last year.

The benefits of the John C. Green memorial fund have been applied to 79 different women in limited circumstances, six more than last year

IMPROVEMENTS.

The principal improvement in the year have been, (1) the completion of the finishing and furnishing of the attic story of the original edifice; (2) in the garden, the blasting and removal of about 500 perches of the underlying ledge in order to gain sufficient depth of earth, — the removal of trees and box that obstructed cultivation and were of no manner of use, — the construction of macadamized roads to facilitate the necessary carting, — regrading and complete under-draining with tile; (3) the continuation of the boundary road, which will be completed in the course of the coming spring; (4) the setting out upon the building line and thorough reconstruction of the boundary fence on Tenth avenue, from One Hundred and Thirteenth to One Hundred and Twentieth streets, and on One Hundred and Twentieth street from Tenth avenue to the Boulevard, a distance altogether of nearly half a mile; (5) the macadamizing of all the walks and drives on the east side of the main avenue approaching the center building; (6) replacing decayed wooden fences of the stable yards with stone walls; (7) repairing, painting and furnishing the house at White Plains; (8) the completion of the thorough renovation of the center building, including new ceilings and center pieces in most of the rooms and corridors, and (9) a large amount of painting and minor repairs and improvements on account of wear and damage.

Some conception of the large amount of work and expenditure necessary to preserve the property and appliances of the institution and keep them in proper order, may be gained from a statement of the fact that four or five painters in constant and diligent service are scarcely able to keep their work abreast of the requirements of the moment.

Finishing and furnishing the attic story of the original edifice, and the use of one wing of it as lodging rooms for from 16 to 20 female

attendants and their removal from the halls at night, renders it practicable to receive from 10 to 15 more female patients than we have hitherto done. The wing not used by attendants is required for servants. I trust that the addition of a mansard story to the east building will be accomplished in the course of the next year or two, and a like increase of the capacity of the house on the men's side be thereby gained.

A light, handsome amusement room, occupying the whole fourth floor of the center building, proves altogether satisfactory for the uses to which it is devoted.

No change has occurred in the *personnel* of the staff officers, and I again have much pleasure in bearing testimony to their continued fidelity and efficiency. I wish to especially commend their zealous interest in the comfort and welfare of all the patients, and in maintaining the high reputation of the institution.

As the services of the attendants who for various reasons prove incompetent are dispensed with, new ones are taken in and trained, and the body of attendants presents a very positive example of the "survival of the fittest." As a rule, they are well qualified for the grades of service to which they are assigned, and have discharged their duties with very satisfactory tact, patience and fidelity.

This report should not be closed without mentioning the fact that the number of patients treated in the year, the number in limited circumstances pecuniarily assisted, the number able to pay liberally and the gross receipts have been somewhat larger than ever before. The results of treatment were fairly satisfactory, but would have been more so had not 10 or 12 cases been prematurely removed.

Thanking you for your constant support and personal kindness in the discharge of the delicate and trying duties of the medical superintendent of this department of the hospital,

I am, with great respect,

Your obedient servant,

CHARLES H. NICHOLS,

Medical Superintendent.

REPORT

OF THE

COMMITTEE ON ACCOUNTS.

FOR THE YEAR 1883.

REPORT OF THE COMMITTEE ON ACCOUNTS.

FOR THE YEAR 1883.

The committee appointed, in obedience to the by-laws, to audit the accounts of the hospital, and to make an inventory of all the real and personal estate belonging to the corporation, and a schedule of all the deeds, etc., in custody of the treasurer, and a general statement of all the accounts, report as follows :

The receipts of the New York Hospital in 1883 were :

The total amount chargeable for maintenance and treatment of patients in the hospital and out-patient department, was.....	\$64,800 06	..
Of which was furnished from the charity fund.....	38,229 98	
Amount of cash received from patients..	\$26,570 00	
Special ambulance service.....	155 00	
Articles sold.....	408 08	
		<u>\$27,133 16</u>

The payments for the same period were :

Current expenses of hospital proper....	\$89,539 27	
Training school for nurses	7,206 28	
Expenses of executive building and administration of corporate affairs.....	7,705 08	
Out-patient department	4,511 11	
Library.....	2,931 69	
		<u>111,893 43</u>

The excess of payments over receipts for 1883 were.. \$84,760 27

The receipts of Bloomingdale Asylum for 1883 were :

Board and treatment of patients.....	\$177,120 83	
Less board and treatment money refunded,	7,242 22	
		<u>\$169,878 61</u>
Clothing and personal expenses of patients.....	7,092 30	
Articles sold.....	834 95	
Telephonic and telegraphic messages...	8 79	
White Plains farm account.....	267 16	
Miscellaneous credits.....	80 76	
		<u>\$178,162 57</u>

The payments for the same period were :

House and other supplies.....	\$98,358 00	
Salaries and wages.....	70,392 60	
Clothing and personal expenses of patients.....	9,015 46	
Board of patients in the country.....	1,209 72	
Telegraph and telephone expenses.....	268 80	
Current repairs and improvements	6,769 27	
	<hr/>	\$186,013 85

The excess of payments over receipts for 1883 were...	<hr/>	\$7,851 28
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<i>The payments on account of the support of the house of relief for 1883 were</i>	<hr/>	\$24,550 13
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Total receipts of the three institutions {	\$27,133 16	
for 1883	178,162 57	
	<hr/>	\$205,295 73

Total expenditures of the three institutions for 1883 for current expenses, {	\$111,893 43	
	24,550 13	
	186,013 85	
	<hr/>	322,457 41

Excess of expenditures over receipts at three institutions for 1883	<hr/>	\$117,161 68
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THE RECEIPTS AND PAYMENTS OF THE INSTITUTION FROM ALL SOURCES AND ON ALL ACCOUNTS DURING THE YEAR 1883 HAVE BEEN.

The receipts are as follows :

Balance cash on hand January 1, 1883.....	\$19,512 66
On account of Bloomingdale Asylum.....	178,162 57
Income from the J. C. Green memorial fund.....	12,000 00
Rents and ground rents.....	160,490 67
* Board of patients, receipts out-patient department, etc	27,133 16
Balance of legacy of Simeon Abrahams.....	62 50
Balance bequest of Eliza Mott.....	2,956 62
Balance bequest of Maria Hobby	3,417 43
Dividend Sandusky, Newark & Mansfield railroad....	5 75
Membership subscriptions.....	80 00
Donation from Mrs. John W. Auchincloss.....	20 00
Temporary loans.....	46,000 00
	<hr/>
	\$449,841 36

* Including donations from the Sixth Avenue Railroad Company and J. B. & J. M. Cornell of \$100 each.

The payments are as follows :

On account of the support of Bloomingdale Asylum,	\$186,013 85
General expenses of the New York Hospital.....	111,893 43
General expenses of the House of Relief.....	24,550 13
General expenses of the pathological department....	3,196 34
Pocket-cases of instruments to out-going staff.....	150 00
Repairs to building 319 Broadway.....	305 25
Drafts of asylum committee on account of income from the J. C. Green memorial fund.....	12,020 52
Interest on hospital bonds and temporary loans.....	35,519 51
Real estate, taxes and assessments on unimproved prop- erty and legal services and disbursements.....	64,959 06
Insurance.....	136 07
Balance cash on hand December 31, 1883.....	11,097 20
	<hr/>
	\$449,841 36

GEORGE CABOT WARD,

Treasurer.

The committee have examined all the accounts presented to them, and have found them correct. They are herewith presented. For a schedule of deeds, bonds, etc., the committee beg to refer to the treasurer.

WILLIAM M. HALSTED,

WILLIAM H. FOGG,

Committee.

NEW YORK, *February 2, 1884.*

THE TOTAL EXPENDITURE

*Involved in carrying on the operations of the Society for the year 1883
is distributed as follows :*

Current expenses of the hospital proper...	\$89,539 27
Less received for articles sold.....	563 08
	<hr/>
	\$88,976 19
Current expenses of out-patient department,	4,511 11
	<hr/>
	\$93,487 30
Less received on account of same.....	26,570 08
	<hr/>
	\$66,917 22
Current expenses House of Relief.....	24,550 13
Current expenses Bloomingdale Asylum	7,851 28
Training school for nurses	7,206 28
Library.....	2,931 69
Pathological department.....	3,196 34

Interest.....	\$35,540 03
Executive building and administration of corporate affairs.....	7,705 08
Insurance, etc	286 07
Real estate, assessments and taxes on unimproved property, and legal expenses and disbursements.....	61,898 56
	<hr/>
	\$218,082 68
The total income was.....	163,667 22
	<hr/>
Increase of the debt	\$54,415 46
The number of days of hospital treatment was	51,030
The total cost of maintenance and treatment was	\$88,976 19
The cost of maintaining and treating each patient per day.....	1 74 $\frac{1}{4}$

NEW YORK HOSPITAL.

General expenses for the year 1883.

Meats :

Beef.....	\$5,973 98	
Mutton and veal.....	2,050 84	
	<hr/>	\$8,024 82

<i>Eggs</i>	1,644 44
<i>Milk</i>	3,902 64

Other provisions :

Ham, bacon, etc	\$815 88
Pork	220 90
Poultry.....	1,727 27
Fish.....	1,352 07
Coffee.....	935 09
Sugar	1,727 77
Butter.....	2,878 29
Tea.....	388 35
Bread.....	2,497 76
Ice.....	759 77
Potatoes.....	1,099 50
Fruit	2,144 05
Vegetables.....	1,153 36
Meal and farinaceous food.....	291 98
Rice.....	132 76
Flour.....	180 93
Cheese.....	100 75
Salt	13 55
Crackers	100 55
Vinegar.....	24 61
Yeast and hops	38

Cocoa and chocolate.....	\$9 44	
Spices and flavoring extracts	82 41	
Pickles, sauces, etc.....	79 77	
Pepper, mustard.....	31 44	
Confectionery.....	68 65	
Molasses, syrup.....	45 20	
Lard.....	154 48	
Canned goods	248 09	
	<hr/>	\$19,265 05

Medical and Surgical Department :

Wine and liquors.....	\$810 78	
Malt liquors.....	92 23	
Medicines.....	3,750 53	
Apothecary shop.....	337 09	
Surgical instruments.....	898 31	
Surgical stores and apparatus.....	4,695 29	
Ambulance, hay, feed, repairs, etc.....	1,585 27	
Clothing.....	210 64	
	<hr/>	12,380 14

Household Expenses :

Kitchen utensils.....	\$55 46	
Crockery, glass, etc.....	431 02	
Bedding, linen.....	1,188 21	
House expenses.....	2,826 82	
Furniture.....	825 72	
	<hr/>	5,327 23

Executive Department :

Printing.....	572 14	
Stationery.....	771 34	
Car fares.....	92 75	
Postage....	152 75	
Newspapers, telegrams, expressage, etc..	70 81	
Messenger service	22 30	
	<hr/>	1,682 09

Salaries, Wages :

Including salaries of the librarian, treasurer's office and training school.	34,587 55
--	-----------

Heat, Lighting, and Croton Water :

Engineer's department	\$2,553 84	
Coal.....	8,274 61	
Wood.....	67 50	
Gas.....	4,209 47	
Plumbing and gas fitting.....	797 65	
Croton water.....	1,941 90	
	<hr/>	17,844 97

Library :

Books and periodicals. \$1,431 69

Training School :

Current expenses. 1,185 85

Miscellaneous :

General repairs.	\$706 11	
Lumber.	243 17	
Carpenter work.	29 67	
Glazing, paints, oil, etc.	179 55	
Plants, bird seed, etc.	124 83	
Hardware.	81 87	
Permanent alterations of nurses' floor and laboratory.	1,316 01	
Repairs to wash-room adjoining operat- ing theatre.	80 00	
Cleaning and pencilling stone work of hospital.	950 00	
Two horses.	565 00	
Radiators nurses' departments.	114 75	
Telephone service.	226 00	
	<hr/>	4,616 96
		<hr/> <hr/>
		\$111,893 43

The above sum is applicable to the various departments of the Hospital as follows :

Current expenses of hospital proper.	\$89,539 27	
Training school for nurses.	7,206 28	
Expenses of executive building and ad- ministration of corporate affairs.	7,705 08	
Out-patient department.	4,511 11	
Library.	2,931 69	
	<hr/>	\$111,893 43

BLOOMINGDALE ASYLUM.

General Expenses for the Year 1883.

For Articles of Food :

Meats — Beef, mutton, veal, lamb and canned soups.	\$17,430 49
Meats — Hams, sausages, fresh pork, head-cheese and lard.	4,096 95

Fish — fresh and salt — including oysters and clams.....	\$3,272 43	
Poultry.....	2,630 57	
Eggs.....	2,399 92	
Butter, \$5,618.12 ; and cheese, \$585.35.	6,203 47	
Milk, fresh and condensed.....	1,320 26	
Ice cream, confectionery, etc., etc.....	614 73	
Flour — fine and Graham — oatmeal, crackers, corn-starch, vermicelli, macaroni, yeast, baking powder and cream tartar.....	3,414 79	
Rice, barley, tapioca, farina and gelatine	263 41	
Coffee, chocolate and broma.....	160 48	
Tea... ..	687 23	
Sugars.....	3,281 24	
Syrups, molasses and honey.....	248 46	
Fruits — green, dried and canned.....	4,695 18	
Spices, salt, sweet oil, etc.....	343 17	
Vinegar, cider and pickles.....	199 90	
Vegetables.....	1,840 72	
Ice.....	403 96	
		\$54,507 36

For other Articles of Current Consumption :

Coals.....	\$9,164 22	
Gas, illuminating oils, candles, matches, lanterns, chimneys, etc.....	3,858 30	
Medicines and medical supplies, including malt and spirituous liquors.....	4,079 70	
Soap and soap materials.....	742 40	
Laundry supplies.....	440 64	
Hay and straw, \$739.32; oats and other feed, \$2,207.50.....	2,946 82	
Water for 1 year and 6 months.....	1,974 50	
Brooms, brushes, dusters, woodenware, twine and rope.....	556 89	
Paints, oils, turpentine and glass.....	1,677 20	
Stationery, stamps and printing.....	524 61	
Clothing for patients.....	9,015 46	
Board of patients in the country.....	1,209 72	
Amusements, books, newspapers and periodicals.....	835 36	
Cigars, cigarettes and tobacco.....	44 70	
Horseshoeing and other smithing materials.....	110 95	
Seeds, plants, fertilizers, garden and carpenter's tools, and farming implements for the Asylum and the farm at White Plains.....	2,473 25	
Contingencies.....	608 56	
Carriage hire.....	1,131 78	

Insurance on boilers.....	\$75 00	
		\$41,470 06

For other Articles for Current Use, and Repairs:

Dry goods, house furnishing and clothing	\$1,697 85	
House furniture, carpets, mattress hair and ticking.....	5,569 11	
Table furniture, crockery, glassware, tin-ware, etc.....	409 37	
Cutlery.....	109 69	
Clocks and their repairs.....	4 60	
Hardware, building, kitchen and cabinet	697 87	
Water, steam and gas materials and labor	1,276 02	
Drain pipe, lumber, lime, cement, sand, bricks, tin, copper, lead solder, sheet, bar and round iron, grate bars and other castings, labor, etc., used in current repairs and improvements.....	6,769 27	
Repairs to harnesses, carriages and appurtenances.....	687 94	
Fire apparatus.....	48	
Live stock.....	1.152 35	
Telephone and telegraph account.....	268 80	
Microscope and lenses.....	211 19	
Lawn mowers, 2; and scales, 2.....	169 21	
Supply wagon (double).....	335 00	
Patent arch plates for boilers.....	117 00	
Repairs to old supply wagon.....	93 70	
Legal services.....	50 00	
Articles sold.....	24 38	
		19,643 83
Salaries and wages for the year, including hire of day hands on current repairs and improvements, and of farm superintendence and help at White Plains....		70,392 60
		<u>\$186,013 85</u>

HOUSE OF RELIEF.

General Expenses for the Year 1883.

Articles of food:

Bread.....	\$424 86
Butter.....	602 73
Coffee.....	164 25
Eggs.....	270 81
Extracts.....	8 51
Fish, oysters and clams.....	294 16
Fruit.....	101 71

Hams, shoulders and lard.....	\$130 87	
Ice	174 58	
Ice cream and charlotte russe.....	28 49	
Milk.....	697 16	
Meat.....	1,872 50	
Poultry.....	339 57	
Meal and farinaceous food.....	285 90	
Salt	6 65	
Sugar.....	289 08	
Tea	89 40	
Vegetables	684 64	
Vegetables, canned.....	126 90	
	<hr/>	\$6,592 77

Medical and Surgical department :

Drugs.....	\$1,137 06	
Clothing	30 48	
Muslins, etc., for bandages, etc.....	1,640 47	
Shaving and hair cutting	37 79	
Splints..	61 12	
Surgical supplies.....	547 12	
Surgical instruments	341 48	
Operating chair.....	63 00	
Rubber goods.....	223 17	
Wines, liquors and acid water.....	63 25	
	<hr/>	4,144 94

Ambulance Service :

Ambulance repairs... ..	\$284 20	
Two horses, \$300 each.....	600 00	
Horse hire, doctoring feed and shoeing..	1,489 21	
Ambulance supplies.....	168 98	
Room over stable.....	420 00	
Asphalt floor.....	300 00	
Coal and gaslight	107 97	
	<hr/>	3,370 36

Household :

Crockery and glassware.....	\$70 81	
House.— Soap, candles, blueing, starch, soda.....	98 48	
Mattresses, rep. bed linen, towels, etc....	397 29	
Refrigerator and step-ladders	22 50	
Furniture.— Desk, iron safe, table, iron bedstead for R. room, carpets, etc....	286 88	
Newspapers, stationery.....	216 79	
Advertising unknown.....	20 20	
Messenger service.....	68 22	
	<hr/>	1,181 17
Salaries and wages		6,777 00

Heat, Light and Water :

Gas light.....	\$704 92	
Coal.....	348 60	
Wood.....	81 35	
Water tax.....	27 60	
		<hr/>
		\$1,162 47

Miscellaneous :

Carpenter and mason work.....	\$247 03	
Fire extinguisher repaired.....	14 00	
Germacide.....	36 00	
Awning and repairs.....	19 43	
Carriage hire	3 30	
Street sprinklers.....	8 25	
Petty cash items.....	347 46	
Protective ventilators.....	20 00	
Plumbing and metal work.....	576 90	
Telephone repairs.....	49 05	
		<hr/>
		1,321 42
		<hr/>
Total.....	\$24,550 1	<hr/>

PATHOLOGICAL DEPARTMENT.

Specimens added during the year.

Belonging to the osseous system.....	4
Belonging to the joints and tendons	4
Belonging to the digestive system.....	16
Belonging to the respiratory system.....	2
Belonging to the circulatory system.....	31
Belonging to the nervous system.....	1
Belonging to the genito-urinary system	33
Tumors.....	7
Parasites and miscellaneous.....	2
	<hr/>
Total.....	100

The preparations in the cabinet are classified as follows :

Belonging to the osseus system.....	489
Belonging to the joints and tendons.....	48
Belonging to the digestive system.....	219
Belonging to the respiratory system.....	64
Belonging to the circulatory system.....	212
Belonging to the nervous system.....	98
Belonging to the genito-urinary system.....	371
Casts	154

Pictures.....	240
Tumors.....	31
Parasites and miscellaneous.....	37
Total.....	<u>1,963</u>

LIBRARY.

Total number of volumes on shelves.....	14,196
Added during the year.....	484
Periodicals — United States.....	25 current.
Great Britain	15 “
France	26 “
Germany.....	30 “
Transaction, Hospital, Health, and other reports..	96

ANNUAL REPORT

OF THE

COMMITTEE ON STATISTICS

OF THE

NEW YORK HOSPITAL

FOR THE YEAR ENDING DECEMBER 31, 1883.

COMPILED BY THE CLINICAL REGISTRARS.

IN-PATIENTS — MEDICAL.

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Abortion. ....	..	2	1	1	..	..	82
Alcoholism	88	31	47	61	11	..	280
Amenorrhœa.....	..	1	..	..	1	..	1
Anæmia.....	..	6	5	1	..	..	87
Aneurism, aortic	3	..	..	2	..	1	67
Aneurism, innominate	1	..	..	..	..	1	4
Aorta, rupture of	1	..	..	..	..	1	3
Apoplexy, cerebral.....	14	..	..	6	2	6	326
Asphyxia	10	6	14	1	..	1	64
Bronchitis, acute	9	7	14	2	..	..	288
Bronchitis, chronic.....	5	3	..	7	1	..	213
Cancer of peritoneum.....	1	1	..	1	..	1	48
Cancer of stomach....	2	..	..	..	..	2	44
Cancer of stomach and liver....	..	1	..	..	..	1	1
Cellulitis, pelvic.....	..	10	5	4	1	..	189
Cirrhosis	10	2	..	5	1	6	298
Colic, renal.....	1	..	1	..	..	..	4
Croup, membranous.....	1	..	..	..	..	1	1
Cystitis.....	6	3	5	1	3	..	445
Debility	1	3	1	2	1	..	18
Dementia.....	6	9	..	..	15	..	34
Diphtheria.....	..	1	1	..	..	..	12
Dysentery.....	4	4	8	..	..	..	154
Dyspepsia.....	6	8	12	2	..	..	128
Eczema.....	2	2	2	2	..	..	242
Embolism, cerebral.....	2	..	1	..	1	..	38
Emphysema.....	1	..	..	..	1	..	1
Empyema.....	3	..	1	1	1	..	126
Encephalitis.....	1	..	..	..	..	1	4
Enteralgia	1	..	1	..	..	..	1
Enteritis.....	16	9	16	5	1	3	249
Epilepsy	40	19	3	51	5	..	113
Erysipelas, facial	2	..	1	..	1	..	13
Fever, continued, simple	1	2	3	..	..	..	109
Fever, intermittent	56	15	64	4	2	1	909
Fever, remittent.....	2	..	1	..	..	1	35
Fever, typhoid	27	17	38	2	..	4	2,020
Fœcal impaction.....	5	3	8	..	..	..	47
Gastritis	25	23	26	18	4	..	682
Gout	4	1	3	2	..	..	245
Hæmatemesis.....	2	..	1	1	..	..	20
Hæmoptysis.....	2	..	2	..	..	..	54

IN-PATIENTS — MEDICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Heart, fatty degeneration of....	2	1	..	..	.	3	37
Hemiplegia.....	2	..	..	1	1	..	21
Herpes zoster.....	..	1	1	..	..	..	13
Hysteria.....	2	16	14	4	..	..	147
Insolation.....	18	2	5	9	..	6	42
Intestinal obstruction.....	1	1	..	..	..	2	10
Leucorrhœa.....	..	2	1	1	..	..	35
Lichen, ruber.....	1	..	1	..	..	..	11
Locomotor-ataxia.....	1	..	..	1	..	..	99
Lumbago.....	1	..	1	..	..	..	6
Malingering.....	1	..	1	..	..	..	6
Mania, acute.....	8	2	..	4	6	..	95
Marasmus.....	1	..	..	1	..	..	3
Masturbation.....	1	..	1	..	..	..	22
Melancholia.....	1	..	..	1	..	..	45
Menière's disease.....	1	..	1	..	..	..	51
Meningitis, cerebral.....	2	..	1	1	..	..	11
Meningitis, cerebro-spinal.....	5	1	2	..	..	4	177
Menorrhagia.....	..	2	2	..	..	..	17
Metrorrhagia.....	..	1	1	..	..	..	27
Migraine, specific.....	2	..	1	1	..	..	46
Myalgia.....	2	..	2	..	..	..	12
Myelitis, chronic.....	2	..	2	..	..	..	48
Nephritis, acute.....	4	..	..	..	..	4	78
Nephritis, chronic.....	35	15	..	19	14	17	1,227
Neuralgia.....	19	6	22	3	..	..	300
Neurasthenia.....	1	1	1	..	1	..	34
Œdema glottidis.....	..	1	..	..	..	1	2
Otitis, media.....	1	..	..	..	1	..	5
Ovarian congestion.....	..	1	1	..	..	..	26
Ovarian cyst.....	..	1	..	..	1	..	7
Pachymeningitis, chronic.....	3	..	..	3	..	..	65
Parturition.....	..	6	6	..	..	..	103
Pericarditis.....	2	1	1	..	..	2	320
Peritonitis.....	3	2	..	..	..	5	69
Perytyphlitis.....	3	2	4	1	..	..	32
Pharyngitis.....	4	..	2	2	..	..	57
Phlebitis.....	2	..	1	1	..	..	68
Phthisis.....	36	8	..	21	15	8	676
Pleurisy.....	18	5	15	8	..	..	799
Pneumonia, lobar.....	52	15	33	1	..	33	1,261
Pneumonia, lobular.....	2	1	..	1	..	2	21

IN-PATIENTS — MEDICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Poisoning, aconite	1	..	1	..	..	..	2
Poisoning, arsenic.	2	1	3	..	..	..	11
Poisoning, belladonna.. ....	..	1	1	..	..	..	6
Poisoning, carbolic acid	1	1	2	..	..	..	6
Poisoning, lead	6	..	4	2	..	..	84
Poisoning, mercury	1	1	1	1	..	..	9
Poisoning, nux vomica.....	1	..	1	..	..	..	4
Poisoning, opium	3	2	4	..	..	1	67
Poisoning, prussic acid.....	1	..	1	..	..	..	3
Polio-Myelitis, anterior acute...	1	..	..	1	..	..	2
Pruritus	2	..	2	..	..	..	13
Psoriasis.....	1	..	..	1	..	..	49
Pyæmia.....	1	..	..	..	..	1	2
Rheumatism, acute.....	67	19	76	5	5	..	1,799
Rheumatism, chronic.....	..	1	..	1	..	..	40
Rheumatism, gonorrhœal.....	3	..	2	1	..	..	76
Rheumatism, sub-acute	14	14	22	5	1	..	723
Rubeola.....	1	1	2	..	..	..	21
Sciatica.....	4	..	1	2	1	..	137
Sclerosis(mult., spinal)	1	..	..	1	..	..	15
Senility.. ..	2	2	..	..	4	..	4
Softening of brain.....	..	1	..	..	..	1	3
Spinal cord, carcinoma of.....	1	..	..	..	..	1	5
Stomach, ulcer of. ....	..	1	..	1	..	..	107
Syncope (cardiac).....	..	2	1	1	..	..	4
Syphilis	13	7	..	20	..	..	751
Tænia solium.....	1	..	..	1	..	..	6
Tonsillitis.....	16	8	22	1	1	..	198
Tuberculosis.....	12	6	..	..	1	17	416
Tumor of brain.....	1	1	..	..	..	2	16
Total.....	757	352	554	310	104	141	

IN-PATIENTS — SURGICAL.

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
GENERAL INJURIES.							
Burns and scalds	18	9	11	8	..	8	456
Frost-bite.....	2	1	2	..	1	..	99
General contusions	21	5	14	11	1	..	203
Multiple railroad injuries	9	1	1	..	..	9	74
LOCAL INJURIES.							
<i>Injuries head, face and neck :</i>							
Contusions and wounds.....	315	56	89	274	4	4	963
Concussion	19	7	22	3	..	1	200
Fracture of skull (vault)	15	1	1	1	..	14	110
Fracture of skull (comp.)....	10	1	6	4	..	1	155
Fracture of skull (base).....	5	..	1	..	..	4	69
Fracture of nasal bones (comp.)	4	..	1	2	1	..	7
Fracture of the inferior maxilla	..	1	..	1	..	..	3
Fracture of the inferior maxilla (comp.)	2	..	1	1	..	..	41
Fracture of the superior maxilla (comp.)	4	..	2	2	..	..	81
<i>Injuries of the chest and back :</i>							
Contusions, sprains, wounds,	55	5	24	35	..	1	440
Concussion of the spine	3	..	1	2	..	..	43
Dislocation of the spine	1	..	1	..	..	..	38
Fracture of the ribs.....	17	..	6	9	..	2	249
Fracture of the vertebræ	6	1	1	1	..	5	216
<i>Injuries of the abdomen and pelvis :</i>							
Contusions and wounds	31	10	25	11	4	1	378
Fracture of pelvis.....	2	..	2	..	..	..	110
<i>Injuries of the upper extremity :</i>							
Contusions, sprains, wounds,	285	44	39	284	5	1	867
Dislocation of the humerus..	10	1	1	10	..	..	19
Dislocation of the radius and ulna	4	1	..	5	..	..	30
Fracture of the clavicle	10	2	4	8	..	..	232
Fracture of the humerus	21	4	9	15	1	..	497
Fracture of the humerus (comp.).....	2	..	2	..	..	..	93

IN-PATIENTS — SURGICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Fracture of the metacarpus..	2	..	2	..	..	..	8
Fracture of the phlanges (comp.).....	9	..	..	9	..	..	23
Fracture of the radius	20	12	4	28	..	..	140
Fracture of the radius (comp.)	2	1	2	..	..	1	48
Fracture of the radius and ulna	8	3	1	10	..	..	32
Fracture of the radius and ulna (comp.)	2	1	2	1	..	..	69
Fracture of the ulna.....	3	..	..	3	..	..	3
Fracture of the ulna (comp.),	1	..	..	1	..	..	8
Fracture of the scapula	3	..	2	1	..	..	41
<i>Injuries of the lower extremity :</i>							
Contusions, sprains, wounds,	109	25	68	61	4	1	1,598
Club-foot, surgical diseases ..	2	..	1	..	1	..	131
Dislocation of the femur .....	..	1	..	..	1	..	1
Dislocation of the tibia.....	1	..	..	1	..	..	116
Fracture of the femur.....	30	10	39	1	..	..	2,738
Fracture of the femur (comp.)	1	..	1	..	..	..	52
Fracture of the fibula	42	7	35	14	..	..	1,593
Fracture of the fibula (comp.)	2	..	2	..	..	..	266
Fracture of the metatarsus (comp.).....	3	..	3	..	..	..	93
Fracture of patella.....	6	..	6	..	..	..	452
Fracture of the phlanges (comp.)	1	..	1	..	..	..	48
Fracture of the tibia.....	18	3	17	4	..	..	994
Fracture of the tibia (comp.),	1	..	1	..	..	..	59
Fracture of the tibia and fibula,	17	1	15	3	..	..	607
Fracture of the tibia and fibula (comp.).....	16	..	13	3	..	..	1,003
Fracture of the tibia and fibula (ununited).....	1	..	..	1	..	..	30
Rupture int. lat. lig. knee....	..	1	1	..	..	..	66
SURGICAL DISEASES.							
Abscess.....	28	8	21	10	2	3	921
Adenitis, cervical	2	..	1	1	..	..	145
Adenitis, inguinal	11	5	12	3	1	..	580
Alcoholism	1	2	1	2	..	..	12

IN-PATIENTS — SURGICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Aneurism, popliteal.....	2	..	2	..	..	..	71
Angioma of neck.....	1	..	..	1	..	..	4
Ankylosis of ankle.....	1	..	..	1	..	..	121
Ankylosis of knee	5	2	2	2	3	..	213
Ankylosis of jaw	1	..	1	..	..	..	60
Arthritis (chronic).....	2	2	1	3	..	..	214
Bursitis	2	..	2	..	..	..	52
Calculus of bladder	2	..	2	..	..	..	141
Calculus of urethra	3	..	2	1	..	..	63
Cancer of breast.....	..	6	4	..	2	..	123
Cancer of maxilla (inf.)	1	..	..	1	..	..	30
Cancer of neck	3	1	2	..	2	..	64
Caries of skull	1	..	1	..	..	..	37
Caries of pelvis.....	..	1	..	1	..	..	62
Caries of ribs.....	1	..	1	..	..	..	20
Caries of tarsus	1	..	..	1	..	..	122
Caries of tibia.....	1	..	..	1	..	..	41
Caries of vertebræ	3	..	..	1	1	1	248
Cellulitis	13	9	11	9	2	..	332
Chancroid	8	1	6	3	..	..	203
Cystitis.....	15	4	5	4	7	3	529
Deformity of leg.....	..	1	..	1	..	..	248
Eczema of leg.....	..	1	..	1	..	..	11
Empyema.....	2	..	..	1	..	1	325
Epididymitis.....	2	..	1	1	..	..	47
Epistaxis.....	9	..	7	2	..	..	50
Epithelcoma of maxilla (inf.) ..	5	..	1	2	2	..	44
Epitheleoma of groin.....	..	1	1	..	..	..	74
Epitheleoma of lip	4	..	2	..	2	..	38
Epitheleoma of penis.....	2	..	2	..	..	..	62
Epitheleoma of tongue	3	..	2	..	..	1	83
Erysipelas.....	4	2	2	2	2	..	91
Fissure of anus.....	2	3	3	1	1	..	155
Fistula, anal.....	10	3	8	5	..	..	694
Fistula, perineal.....	1	..	..	..	1	..	4
Furuncle.....	1	..	1	..	..	..	4
Gangrene, (senile), leg	1	1	..	..	..	2	26
Gangrene, (senile), lungs	1	1	7
Genu valgum.....	..	1	1	107
Glossitis	1	1	1
Goitre.....	..	1	..	1	57
Hæmaturia.....	1	..	1	15
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IN-PATIENTS — SURGICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Hæmatocele of tunica vaginalis.	1	..	1	..	..	..	27
Hæmorrhoids.	8	3	5	3	3	..	186
Hernia inguinal	3	..	1	1	1	..	19
Hernia inguinal irreducible	2	..	..	1	1	..	17
Hernia inguinal strangulated...	8	..	3	2	1	2	32
Hydrocele of tunica vaginalis...	9	..	3	5	1	..	196
Hypertrophy of prostate	1	..	..	..	..	1	20
Laceration of cervix uteri.....	..	1	..	1	..	..	66
Lipoma of groin.....	3	..	3	..	..	..	37
Lymphadenoma of neck.....	5	..	3	2	..	..	309
Morbus coxæ.....	1	..	..	1	..	..	26
Necrosis of carpus.....	1	..	1	..	..	..	90
Necrosis of femur.....	..	1	..	1	..	..	66
Necrosis of humerus.....	..	1	..	1	..	..	14
Necrosis of maxilla (inf.)	2	1	1	2	..	..	167
Necrosis of maxilla (sup) .....	..	1	1	..	..	..	41
Necrosis of patella .....	..	1	1	..	..	..	94
Necrosis of skull.....	..	1	..	1	..	..	58
Necrosis of tarsus.....	1	..	..	..	1	..	3
Necrosis of tibia	10	1	8	2	1	..	1,393
Neuralgia of bladder	1	..	1	..	..	..	38
Neuralgia of stump	2	..	1	1	..	..	29
Onychia	1	..	1	..	..	..	90
Orchitis.....	20	..	13	6	1	..	226
Ostitis of femur.....	1	..	..	1	..	..	44
Ostitis of tarsus.....	7	..	1	5	1	..	167
Papilloma of vulva....	..	1	1	..	..	..	24
Paraphymosis	1	..	1	..	..	..	29
Paralysis, median and ulnar nerves .....	..	1	1	..	..	..	56
Periostitis.....	..	2	2	..	..	..	22
Phymosis	6	..	6	..	..	..	66
Polypus of naso-pharynx.....	1	..	..	..	..	1	8
Polypus of rectum.....	1	..	..	1	..	..	15
Proctitis .....	..	2	1	1	..	..	217
Prostatitis ...	1	..	..	1	..	..	32
Retention of urine	17	..	7	10	..	..	42
Rupture of intestines.....	1	..	..	..	..	1	9
Sarcoma of breast.....	1	3	3	1	..	..	118
Sarcoma of femur.....	1	..	1	..	..	..	16
Sarcoma of fore-arm.....	1	..	1	..	..	..	14

IN-PATIENTS — SURGICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.	Number of days in hospital.
Sarcoma of hand .....	....	1	1	..	..	..	20
Sarcoma of maxilla (sup.)	1	1	1	..	..	1	22
Sarcoma of orbit	1	..	..	..	..	1	38
Sarcoma of shoulder	1	..	1	..	..	..	22
Sarcoma of testis	1	..	..	..	..	1	4
Stricture of œsophagus .....	....	2	..	1	..	1	127
Stricture of rectum .....	....	5	1	2	..	2	154
Stricture of urethra	24	..	16	6	1	1	838
Synovitis of ankle	1	..	1	..	..	..	3
Synovitis of knee	14	6	15	3	2	..	769
Syphilis	7	1	..	8	..	..	258
Ulcer of foot and leg	29	18	34	10	3	..	1,195
Urethritis	19	..	9	6	4	..	301
Vaginitis .....	....	1	1	..	..	..	6
Varicocele	6	..	2	1	3	..	77
Varicose veins	1	2	2	1	..	..	44
Total	1,551	327	747	979	75	77	

IN-PATIENTS — SURGICAL — *Continued.*

OPERATIONS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
<i>Amputation :</i>						
Amputation of fingers.....	8	..	8	..	..	.....
Amputation of toes	1	..	1	..	..	.....
Amputation of foot, partial.....	1	..	1	..	..	.....
Amputation of forearm.....	3	..	3	..	..	.....
Amputation of arm.	1	..	1	..	..	.....
Amputation of leg.....	4	..	4	..	..	.....
Amputation at knee joint.....	2	..	2	..	..	.....
Amputation of thigh.....	2	..	2	..	..	.....
Amputation of penis.....	2	..	2	..	..	.....
<i>Incisions :</i>						
Incision, exploratory, abdominal..	..	1	..	..	..	1
Incision, pleural, for foreign body,	1	..	1	..	..	.....
Incision, for lumbar abscess.....	1	..	1	..	..	.....
Incision, for abscess of thigh.....	2	..	2	..	..	.....
Incision, for abscess of thorax....	1	..	1	..	..	.....
Incision, for fistula in ano	9	2	9	2	..	.....
Incision and dilatation for fissure of anus.....	2	..	1	1	..	.....
Incision, for sinuses of back	1	..	..	..	1	.....
Incision, for diffuse hæmatocele ..	1	..	1	..	..	.....
Incision, for hydrocele, Volkmann's,	1	..	1	..	..	.....
Incision, for empyema.....	4	..	1	..	..	3 ^{2 5 6}
Incision, for extra-urethral calculus,	1	..	1	..	..	.....
Incision and drainage of cystic bronchocele .....	..	1	..	1	..	.....
Incision, of præpatellar hygroma..	..	1	1	..	..	.....
Herniotomy ..	3	..	1	..	..	2 ^{2 2}
Laryngotomy.....	2	1	1	..	..	2 ^{3 4}
Laryngo-tracheotomy .....	..	1	1	..	..	.....
Tracheotomy.....	2	3	2	1	..	2 ^{7 8}
Lithotomy-lateral.....	3	..	2	..	..	1 ⁹
Lithotomy-median.....	1	..	1	..	..	.....
Perinaal section	1	..	1	..	..	.....
Perinaal section and supra-pubic incision for rupture of bladder..	1	..	1	..	..	.....
Proctotomy, with artificial fistula in ano.....	1	..	1	..	..	.....
Proctotomy, linear.....	..	4	..	2	..	2 ^{1 3}
Urethrotomy, internal.....	15	..	14	..	..	1 ⁹
Enterotomy	1	..	..	..	..	1 ¹⁰
Laparotomy for intestinal obstruc- tion .	2	..	..	..	1	1 ²
Tenotomy for talipes equino-varus,	1	..	..	1	..	.....

IN-PATIENTS — SURGICAL — *Continued.*

OPERATIONS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
<i>Operations on bones and joints:</i>						
Reduction of dislocation of radius and ulna.....	6	2	8	..	..	.....
Reduction of dislocation of humerus.....	20	..	20	..	..	.....
Reduction of dislocation of femur, Brisement forcé for ankylosis of knee	1	1	2	..	..	.....
Brisement forcé for ankylosis of elbow	1	2	1	2	..	.....
For caries of pelvis	1	..	..	1	..	.....
For caries of rib.....	1	..	..	1	..	1 ^{1 13}
Sequestrotomy for necrosis of tibia, Sequestrotomy for necrosis of femur	8	..	8	..	..	.....
Sequestrotomy for necrosis of femur	1	2	2	1	..	.....
Sequestrotomy for necrosis of patella.....	..	1	1	..	..	.....
Sequestrotomy for necrosis of inferior maxilla.....	..	2	2	..	..	.....
Osteotomy of fibula.....	..	1	1	..	..	.....
Osteotomy of femur, tibia and fibula .....	..	1	1	..	..	.....
Excision of elbow.....	..	1	..	1	..	.....
Excision of astragalus and scaphoid bone	1	..	..	..	1	.....
Excision of metatarsal bone	2	..	2	..	..	.....
Elevation and removal of bone (fracture of skull)	3	..	1	..	..	2 ^{11 13}
Opening of the mastoid cells.....	1	..	..	..	..	1 ^{11 14}
Injection of knee-joint (Schede's), .....	..	1	..	..	1	.....
Incision and drainage of knee-joint,	1	..	..	..	1	.....
Refracture of femur.....	1	..	1	..	..	1
Refracture of tibia and fibula	2	..	2	..	..	.....
<i>Operations on blood vessels and nerves:</i>						
Ligation of femoral artery for aneurism	1	..	1	..	..	.....
Ligation of trachial artery.....	1	..	1	..	..	.....
For popliteal aneurism (elastic compression)	1	..	1	..	..	.....
Excision of varix of forearm.....	..	1	1	..	..	.....
Excision of angioma of elbow....	1	..	1	..	..	.....
Ligation of spermatic veins for varicocele.....	3	..	3	..	..	.....
Suture of median and ulnar nerves, .....	..	1	1	..	..	.....

IN-PATIENTS — SURGICAL — *Continued.*

OPERATIONS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
<i>Unclassified operations:</i>						
Circumcision.....	8	..	8	..	..	.....
Castration	2	..	2	..	..	.....
Castration with removal of tunica vaginalis.....	1	..	1	..	..	.....
Removal of vulvo-vaginal gland..	..	1	1	..	..	.....
Tonsillotomy, double.....	1	..	1	..	..	.....
Nephrectomy.....	..	1	..	..	..	1 ²
Injection of hydrocele.....	6	..	3	2	1	.....
Divulsion of anus for fissure .....	..	2	2	..	..	.....
Litholapaxy.....	1	..	..	..	..	1 ¹⁰
Taxis for strangulated hernia	5	..	5	..	..	.....
Heaton's operation for hernia	2	..	2	..	..	.....
<i>Removal of tumors:</i>						
Carcinoma of breast.....	..	5	5	..	..	.....
Carcinoma of breast and axilla....	..	1	1	..	..	.....
Carcinoma of cervical glands.....	1	..	1	..	..	.....
Condylomata of anus.....	1	..	1	..	..	.....
Cystic tumor of lip	1	..	1	..	..	.....
Cystic tumor of neck.....	1	..	1	..	..	.....
Epithelioma of lip.....	2	..	2	..	..	.....
Epithelioma of inferior maxilla ..	1	..	1	..	..	.....
Epithelioma of tongue	2	..	1	..	..	1 ²
Gouty tumor of heel	1	..	1	..	..	.....
Lipoma of groin.....	1	..	1	..	..	.....
Lipoma of shoulder.....	1	1	2	..	..	.....
Lymphadenoma of neck.	1	1	2	..	..	.....
Lymphadenoma of axilla	1	..	1	..	..	.....
Papilloma of anus	1	..	1	..	..	.....
Sarcoma of tongue.....	1	..	1	..	..	.....
Sarcoma of neck.....	1	1	2	..	..	.....
Sarcoma of breast .....	..	2	2	..	..	.....
Sarcoma of chest wall.....	1	..	1	..	..	.....
Sarcoma of triceps muscle.....	1	..	1	..	..	.....
Sarcoma of naso-pharynx.....	1	..	..	..	..	1 ²
Sarcoma of superior maxilla .....	..	1	1	..	..	.....
Total.....	185	46	186	15	6	24

CAUSE OF DEATH.—(1) Exhaustion. (2) Shock. (3) Pneumonia. (4) Asphyxia. (5) Tuberculosis. (6) Gangrene of lung. (7) Capillary Bronchitis. (8) Membranous croup. (9) Nephritis. (10) Peritonitis. (11) Meningitis. (12) Laceration of brain. (13) Amyloid degeneration. (14) Fracture of skull.

IN-PATIENTS -- NATIONALITY.

Africa.....	1
Australia	2
Austria.....	10
Belgium	2
British Colonies	35
China	1
Cuba	5
Denmark	9
England	167
France.....	44
Germany.....	287
Greece.....	1
Holland.....	7
Hungary.....	7
India.....	2
Ireland	761
Italy.....	177
Mexico.....	3
Norway.....	6
Poland	7
Russia.....	10
Scotland	58
Spain.....	4
South America	3
Sweden.....	20
Switzerland	13
United States.....	1,322
Wales.....	15
West Indies	8
Total.....	2,987

OUT-PATIENTS.

	Males.	Females.	Total.
Injuries and surgical diseases.....	988	405	1,393
Diseases of heart and lungs.....	577	446	1,023
Diseases of head and abdomen	541	509	1,050
Diseases of skin and venereal	705	164	869
Diseases of children	196	169	365
Diseases of women.....	.....	338	338
Orthopædic surgery	25	20	45
Total.....	3,032	2,051	5,083

SUMMARY OF REPORT FOR 1883.

	Males.	Females.	Total
Patients remaining in wards Jan. 1st, 1883.			
Medical.....	33	17	50
Surgical.....	74	22	96
Total .....	.....	.....	146
Patients admitted to wards.			
Medical.....	748	354	1,102
Surgical.....	1,561	325	1,866
Total.....	.....	.....	2,998
Number of patients, under treatment.			
Medical.....	781	371	1,152
Surgical.....	1,635	347	1,982
Total.....	.....	.....	3,134
Patients discharged from wards.			
Cured..... { Medical..... 554 }	.....	.....	1,301
{ Surgical..... 747 }			
Improved { Medical..... 310 }	.....	.....	1,289
{ Surgical..... 979 }			
Not improved..... { Medical..... 104 }	.....	.....	179
{ Surgical..... 75 }			
Died { Medical..... 141 }	.....	.....	218
{ Surgical..... 77 }			
Total.....	.....	.....	2,987
Patients remaining in wards, Jan. 1st, 1884.			
Medical.....	24	19	43
Surgical	84	20	104
Total.....	.....	.....	147
Operations performed.....	.....	.....	231
Out-patients treated during the year.....	.....	.....	5,083
Deaths from injuries.....	.....	.....	53
Number of ambulance calls.....	1,036		
Average time occupied by each call.....	27 minutes		

IN-PATIENTS — MEDICAL.

DIAGNOSIS.	Male.	Female.	Cured.	Improved.	Not improved.	Died.
Alcoholism.....	4	1	2	..	..	3
Asphyxia.....	3	1	2	2	..	..
Aneurism of aorta.....	1	..	..	..	..	1
Bright's disease	10	4	2	..	..	12
Bronchitis.....	1	..	..	..	..	1
Cerebral hæmorrhage.....	6	1	..	..	..	7
Insolation	3	..	..	..	..	3
Internal hæmorrhage.....	1	..	..	..	..	1
Meningitis.....	..	2	..	..	..	2
Pneumonia	8	4	..	..	..	12
Pulmonary embolism.....	1	..	..	..	..	1
Perforating ulcer of stomach.....	..	1	..	..	..	1
Poisoning, arsenic	1	1	..	..	..	2
Poisoning, chloral.....	1	..	..	..	..	1
Rheumatism.....	..	1	..	1	..	..
Tuberculosis (acute pulmonary).....	6	..	..	1	..	5
Tuberculosis, general.....	1	..	..	..	..	1
Laryngitis.....	..	1	1	..	..	..
Total	47	17	7	4	..	53

IN-PATIENTS — SURGICAL.

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
GENERAL INJURIES.						
General contusions	1	1	11	..	..	...
Multiple injuries.....	12	..	..	..	..	12
Fracture of radius and ulna, and con- tusion of hip	1	..	1	..	..	...
Fracture of humerus, comp., and frac- ture of pelvis.....	1	..	1	..	..	...
Fracture of tibia and fibula of both legs, and Colles' fracture.....	1	..	1	..	..	...
Fracture of tibia and fibula, comp., of right leg, and fracture of tibia and fibula of left leg.....	1	..	..	1	..	...
Fracture of skull, comp., fracture of left radius and ulna, comp. fracture of right radius and ulna	1	..	..	1	..	...
Fracture of sternum and Colles' fracture, Fracture of pelvis and contusion of chest and abdomen.....	..	1	1	..	..	...
Dislocation of hip, fracture of tibia, and lacerated wound of perineum...	1	..	1	..	..	...
Total.....	20	2	6	3	..	12
LOCAL INJURIES.						
<i>Injuries of head, face and neck:</i>						
Wounds of scalp, incised.....	1	..	1	..	..	...
Wounds of throat, incised.....	2	..	1	..	..	1
Wounds of face, pistol shot	1	..	1	..	..	...
Concussion of brain.....	2	2	1	1	..	2
Fracture of skull and meningeal hemorrhage	5	..	1	..	..	4
Fracture of skull, comp., pistol shot,	3	..	1	..	..	2
Fracture of skull, comp.....	8	1	3	2	..	4
Fracture of base of skull	13	..	..	..	..	13
<i>Injuries of chest and back:</i>						
Wounds, pistol shot, penetrating....	1	..	1	..	..	...
Contusion of back .....	..	1	1	..	..	...
Fracture of ribs.....	2	..	1	..	..	1
Fracture of vertebræ, and contusion and laceration of kidney.....	1	..	..	..	..	1

IN-PATIENTS — SURGICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
<i>Injuries of abdomen and pelvis:</i>						
Wounds, incised, penetrating.....	2	..	1	..	..	1
Wounds, pistol shot, penetrating....	3	..	1	..	..	2
Laceration of urethra	1	..	1	..	..	...
Fracture of pelvis.....	1	..	1	..	..	...
Fracture of pelvis, comp.....	1	..	..	1	..	...
<i>Injuries of the upper extremity:</i>						
Lacerated wounds of hand	4	..	4	..	..	...
Lacerated wounds of forearm.....	..	1	1	..	..	...
Fracture of phalanges, comp.....	3	..	2	1	..	...
Fracture of metacarpal bones, comp.,	3	..	1	2	..	...
Fracture of ulna, comp., and fracture of radius.....	..	1	..	1	..	...
Fracture of radius and ulna, comp., comminuted and fracture of hu- merus.....	1	..	1	..	..	...
Fracture of olecranon .....	..	1	1	..	..	...
Fracture of humerus, comp	3	..	3	..	..	...
Fracture of surgical neck of humerus with subglenoid dislocation.....	..	1	..	1	..	...
Dislocation of clavicle.....	..	1	..	..	1	...
Dislocation of humerus.....	..	1	..	1	..	...
Dislocation of thumb, old.....	1	..	1	..	..	...
Dislocation of carpus, comp.....	1	..	1	..	..	...
<i>Injuries of the lower extremity :</i>						
Wound of knee-joint, penetrating...	1	..	1	..	..	...
Contusion of hip.....	..	1	1	..	..	...
Fracture of femur.....	2	..	2	..	..	...
Fracture of femur, comp.....	3	..	3	..	..	...
Fracture of tibia.....	2	..	..	2	..	...
Fracture of tibia, comp.....	4	..	4	..	..	...
Fracture of tibia, comp., and fracture of fibula	3	1	1	3	..	...
Fracture of fibula.....	..	1	1	..	..	...
Fracture of fibula, comp	1	..	1	..	..	...
Fracture of fibula, comp., and fracture of tibia	1	..	1	..	..	...
Fracture of tibia and fibula	4	1	5	..	..	...
Fracture of tibia and fibula, comp ..	4	1	2	1	..	2
Fracture of patella.....	2	..	2	..	..	...
Fracture of astragalus.....	..	..	..	..	..	...

IN-PATIENTS — SURGICAL — *Continued.*

DIAGNOSIS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
<i>Injuries of the lower extremity — Continued.</i>						
Fracture of femur and tibia, comp ..	1	..	..	..	..	1
Dislocation of hip.....	4	1	1	4	..	...
Total	96	16	56	21	1	34
SURGICAL DISEASES.						
Abscess, popliteal.....	2	..	2	..	..	...
Ankylosis of hip.....	1	..	..	1	..	...
Ankylosis of hip and knee.....	..	1	..	1	..	...
Arthritis of knee.....	1	2	..	3	..	...
Arthritis of wrist.....	1	..	..	1	..	...
Arthritis of elbow.....	..	..	..	..	..	...
Adenitis, inguina	1	..	1	..	..	...
Bursitis of elbow, suppurating.....	1	..	1	..	..	...
Cancer of breast .....	..	2	2	..	..	...
Cellulitis .....	..	1	..	1	..	...
Chronic cellulitis of neck	1	..	..	1	..	...
Conical stump.....	1	..	1	..	..	...
Cystic tumor of cheek.....	1	..	1	..	..	...
Epididymitis	1	..	1	..	..	...
Empyæma, traumatic.....	2	..	1	1	..	...
Epithelioma of lip	1	..	..	1	..	...
Extravasation of urine.....	2	..	2	..	..	...
Epistaxis.....	..	1	1	..	..	...
Fissure of anus	1	..	1	..	..	...
Genu-valgum	1	..	..	..	1	...
Hernia, inguinal; reducible 5; irreducible 4.....	9	..	2	5	2	...
Hernia, femoral.....	1	..	..	1	..	...
Hernia, ventral.....	..	1	..	1	..	...
Hernia, strangulated	3	..	1	1	..	1
Hygroma, subdeltoid	1	..	1	..	..	...
Hydrocele of tunica vaginalis.....	1	..	..	1	..	...
Hæmorrhoids	3	..	1	2	..	...
Ingrown toe nail .....	..	2	2	..	..	...
Lymphadenoma, axillary.....	1	..	1	..	..	...
Malignant pustule.....	1	..	1	..	..	...
Necrosis of tibia	2	1	..	2	1	...
Ostitis	1	1	..	..	2	...
Periostitis.....	..	1	1	..	..	...
Retention of urine	3	..	1	2	..	...
Stricture of urethra.....	14	..	5	7	1	1
Total	58	13	30	32	7	2

IN-PATIENTS — SURGICAL — *Continued.*

OPERATIONS.	Males.	Females.	Cured.	Improved.	Not improved.	Died.
Amputation of fingers.....	4	..	4	..	..	...
Amputation of forearm.....	1	..	1	..	..	...
Amputation of arm	2	1	3	..	..	...
Amputation of knee-joint.....	2	..	2	..	..	...
Amputation of leg	1	1	2	..	..	...
Amputation of leg, re-amputation.....	1	..	..	..	..	1 ¹
Amputation of thigh.....	1	..	1	..	..	...
Dilatation of sphincter ani.....	1	..	..	1	..	...
Elevation and removal of bones of skull, fracture.....	7	1	2	3	..	3 ²
Excision of elbow	1	..	1	..	..	...
Excision of head of humerus .....	..	1	..	1	..	...
Excision of ankle	1	..	..	..	..	1 ³
Excision of metacarpo phalangeal-joint,	1	..	1	..	..	...
Excision of rib, empyæma	3	..	2	1	..	...
Evulsion of nail .....	..	2	2	..	..	...
Hernia, radical cure, Heaton's.....	5	..	..	4	1	...
Hernia, by taxis.....	2	..	1	1	..	...
Herniotomy	2	..	1	..	..	1 ⁴
Incision for abscess.....	1	1	1	1	..	...
Incision of sinus.....	2	..	1	1	..	...
Incision and drainage of subdeltoid bursa	1	..	1	..	..	...
Intravenous injection of saline solution,	2	2	1	3	..	...
Perineal section.....	2	..	2	..	..	...
Paracentesis thoracis.....	1	..	..	1	..	...
Reduction of dislocation of hip.....	5	1	2	4	..	...
Reduction of dislocation of humerus ..	2	1	1	2	..	...
Removal of bone from conical stump..	1	..	1	..	..	...
Removal of epithelioma of lip	1	..	..	1	..	...
Removal of carcinoma of breast.....	..	2	2	..	..	...
Removal of lymphadenoma.....	2	..	1	1	..	...
Removal of carious bone.....	..	1	..	1	..	...
Refusion, carbonic oxide poisoning....	1	..	1	..	..	...
Rupture of adhesions at hip-joint. ...	1	1	..	2	..	...
Tenotomy.....	2	..	1	1	..	...
Trephining for chronic ostitis	1	2	1	2	..	...
Tapping hydrocele	1	..	..	..	1	...
Transplantation of skin.....	3	..	3	..	..	...
Urethrotomy, internal	3	..	2	1	..	...
Urethrotomy, external.....	1	..	1	..	..	...
Volkmann's operation for hydrocele....	1	..	1	..	..	...
Total	69	17	46	32	2	6

CAUSE OF DEATH — (1) Exhaustion. (2) Meningitis. (3) Shock. (4) Peritonitis.

OUT-PATIENTS.

Dislocations	160
Fractures	540
Medical diseases	680
Surgical diseases.....	1,604
Wounds and other injuries.....	8,643
Total.....	11,627

OUT-PATIENTS — OPERATIONS.

Aspiration of bladder.....	13
Amputation of fingers and toes.....	144
Incision for abscess	221
Ingrown toe-nail (Cotting's)	5
Injection of hæmorrhoids.....	1
Ligation of radial artery.....	4
Ligation of ulnar artery	3
Ligation of temporal artery.....	2
Removal of foreign bodies	234
Removal of necrosed phalanges.....	10
Removal of tumors.....	13
Reduction of dislocated humerus	77
Reduction of dislocated radius and ulna.....	30
Reduction of dislocated ulnar.....	2
Reduction of dislocated clavicle.....	7
Reduction of dislocated carpal bones.....	2
Reduction of dislocated tarsus.....	1
Reduction of dislocated phalanges.....	33
Reduction of dislocated inferior maxilla.....	6
Reduction of dislocated metacarpal bones.....	3
Reduction of paraphimosis.....	3
Tapping of hydrocele.....	9
Taxis for hernia	17
Total.....	840

TRANSFERRED TO OTHER HOSPITALS.

Bellevue Hospital	850
New York Hospital	349
Castle Garden Hospital.....	45
Maternity Hospital.....	16
Marine Hospital	18
St. Vincent's Hospital.....	4
St. Francis Hospital.....	2
Long Island City Hospital.....	2
St. Luke's Hospital	3
Home	34
Trinity Infirmary.....	1
Reception Hospital.....	1
Total	1,325

SUMMARY OF REPORT FOR 1883.

	Males.	Females.	Total.
Patients remaining in wards Jan. 1, 1883,	10	3	13
Patients admitted to wards	220	48	268
Patients admitted to reception ward	1,718	382	2,100
Number of patients treated.....	1,948	433	2,381
Patients discharged from wards :			
Cured.....	44		
Improved.....	110		
Not improved.....	9		
Died	102		
Patients discharged from recep-			
tion ward.....	2,100		2,365
Patients remaining in wards Jan. 1, 1884,	12	4	16
Patients treated in out-patient dep't :			
Injuries	9,343		
Medical.....	680		
Surgical.....	1,604		11,627
Operations performed in wards.....			86
Operations performed in out-patient dep't,			840
Deaths from injuries.....			45
Patients transferred to other hospitals ..			1,325

Total number of ambulance calls..... 2,345

Average time of each call..... 24 min.

MORTIMER V. WILKIE, M. D.
House Surgeon.

STATE OF NEW YORK.

No. 120.

IN ASSEMBLY,

MARCH 13, 1884.

REPORT

OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton submitted the report from the sub-committee of the whole, which was laid on the table and ordered printed.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 315, G. O. 308, entitled "An act to extend the operation and effect of the act passed February 17, 1848, entitled 'An act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes,'" reported in favor of the passage of the same with amendments as follows:

Section 1, line 1, strike out the words "the act," and insert "chapter 40 of the Laws of 1848;" line 5, strike out the word "or," and after the word "chemical," insert "agricultural, horticultural, medical or curative, mercantile or commercial;" lines 5 and 6, strike out the words "passed February 17, 1848;" with the title also amended so that it will read "An act to extend the operation and effect of chapter 40 of the Laws of 1848, entitled 'An act to authorize the formation of corporations for manufacturing, mining, mechanical, chemical, agricultural, horticultural, medical or curative, mercantile or commercial purposes.'"

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton
Nason
Earl
Childs

Beckwith
Allen
Geddes

Haskell
Priddy
Clinton — 10.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 252, G. O. 253, entitled "An act relative to the drain or ditch constructed in pursuance of chapter 372 of the Laws of 1867, through certain towns in Seneca county," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Priddy
Nason	Allen	Pierson
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 286, G. O. 283, entitled "An act to amend chapter 363 of the Laws of 1851, entitled 'An act to amend the charter of the village of Piermont, in the county of Rockland,'" reported in favor of the passage of the same with an amendment, by striking out in line 1 of section 1, the words "the act," and inserting "chapter 363 of the Laws of 1851."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Priddy
Nason	Allen	Pierson
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 311, G. O. 304, entitled "An act to re-establish boards of town auditors in the county of Richmond," reported in favor of the passage of the same with amendments, as follows:

Section 1, line 3, after the word "eighty-three," insert "entitled 'An act to repeal chapter 180 of the Laws of 1875, entitled An act creating a board of town auditors in the several towns of this State, and to prescribe their powers and duties,' and also the acts amendatory thereof;" with the title also amended so as to read as follows: "An act to amend chapter 48 of the Laws of 1883, entitled 'An act to repeal chapter 108 of the Laws of 1875, entitled An act creating a board of town auditors in the several towns of this State, and to prescribe their powers and duties,' and also the acts amendatory thereof."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Priddy
Nason	Allen	Pierson
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 220, G. O. 215, entitled "An act to facilitate the improvement of the public highways," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Geddes
Nason	Beckwith	Priddy
Earl	Allen	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 67, G. O. 62, entitled "An act in relation to appeals from decrees and orders of surrogates and surrogates' courts," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Beckwith	Haskell
Nason	Allen	Priddy
Earl	Geddes	Clinton — 10.
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 274, G. O. 270, entitled "An act to amend chapter 492 of the Laws of 1860, entitled 'An act to authorize the formation of a mutual insurance company in the towns of Rensselaerville and Westerlo, in the county of Albany, and the towns of Durham and Greenville, in the county of Greene,'" reported in favor of the passage of the same with an amendment by striking out section 2, and inserting in lieu thereof, as follows:

"The time for the continuance of the Village Fire Insurance Association of Greenville, Durham, Westerlo and Rensselaerville, is hereby extended twenty-five years from the passage of this act."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Beckwith	Haskell
Nason	Allen	Priddy
Earl	Geddes	Clinton — 10.
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 336, G. O. 337, entitled "An act to legalize and confirm the title of the St. Paul's Methodist Episcopal Church of Onondaga valley to certain lands in the town of Onondaga," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Beckwith	Haskell
Nason	Allen	Priddy
Earl	Geddes	Clinton — 10.
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 132, G. O. 317, entitled "An act to amend chapter 291 of the Laws of 1870, entitled 'An act for the incorporation of villages,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Priddy
Nason	Allen	Pierson
Earl	Geddes	Clinton — 11.
Childs	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 38, G. O. 326, entitled "An act to amend chapter 248 of the Laws of 1878, as amended by chapter 405 of the Laws of 1879, and chapter 172 of the Laws of 1883, entitled 'An act in relation to the election of officers in certain school districts,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Haskell
Nason	Allen	Priddy
Earl	Geddes	Clinton — 9.

STATE OF NEW YORK.

No. 121.

IN ASSEMBLY.

MARCH 13, 1884.

LIST OF GENERAL ORDERS.

G. O.

434. Introduced by Mr. Bailey:

An act to provide for the assessment of property in certain cases, and to regulate and equalize the same.

435. Introduced by Mr. Cady:

An act to equalize taxation.

436. Introduced by Mr. Nash:

An act to amend chapter 331, Laws of 1879, entitled "An act to facilitate the transaction of public business by authorizing the administration of oaths in matters pertaining to canal business."

437. (Senate.) Introduced by Mr. Daggett:

An act to amend chapter 27 of the Laws of 1875, entitled "An act to designate the holidays to be observed in the acceptance and payment of bills of exchange, bank checks and promissory notes," as amended by chapter 30 of the Laws of 1881.

438. Introduced by Mr. Forsyth:

An act to legalize and confirm the building and construction of a sewer in the city of Cohoes, called the Ravine sewer, from under or near the mill called Brockway's mill, westerly through the water-course or ravine north of Bridge street to or near the bridge over the New York Central and Hudson River railroad at Johnston avenue, and to provide for the levying, assessment and collection of the expenses of such construction and interest upon the lots benefited thereby.

439. Introduced by Mr. Clarke:

An act to provide for the proper removal of stable manure from the city of New York.

440. Introduced by Mr. Clarke:

An act in relation to stenographers in the district courts in the city of New York.

G. O.

441. Introduced by Mr. Clarke :

An act to authorize the construction of gas-works, and the manufacture and sale of gas, for the purpose of lighting the streets, roads, avenues, parks and buildings in the 23d and 24th wards in the city of New York.

442. Introduced by Mr. Clarke:

An act to alter the map or plan of the city of New York, made and filed by the commissioners of the department of public parks, by striking therefrom so much of the proposed Morris avenue as lies between 162d street and Overlook avenue, and so much of the proposed 165th street as lies between Winfield place and Sheridan avenue, in the 23d ward of said city.

443. Introduced by Mr. Hodges :

An act to authorize the registrar of arrears of the city of Brooklyn to accept certificates of sales for taxes in said city made since the year 1862, in payment of certain taxes.

444. Introduced by Mr. Forsyth :

An act to amend chapter 290 of the Laws of 1881, entitled "An act for the preservation of the public peace and protection of private property, and the maintenance of law and good order in the first collection district of the town of Watervliet in Albany county."

445. Introduced by Mr. House:

An act in relation to Grammercy park in the city of New York.

446. Introduced by Mr. Forsyth:

An act to amend chapter 692 of the Laws of 1870, entitled "An act to establish and maintain a police force in the city of Cohoes," as amended by chapter 269 of the Laws of 1873, and as further amended by chapter 482 of the Laws of 1879.

447. Introduced by Mr. Forsyth :

An act to authorize the paving of Remsen street in the city of Cohoes, from White street northerly to the intersection of Remsen and Mohawk streets in said city.

448. Introduced by Mr. Forsyth :

An act to amend an act entitled "An act to incorporate the city of Cohoes," passed May 19, 1869, and other acts amendatory of the same.

449. Introduced by Mr. Forsyth:

An act to amend an act entitled "An act to incorporate the city of Cohoes," passed May 19, 1869, and the acts amendatory of the same.

450. Introduced by Mr. Forsyth :

An act to amend an act entitled "An act to incorporate the city of Cohoes," passed May 19, 1869.

G. O.

451. Introduced by Mr. Forsyth :

An act to amend an act entitled "An act to provide for a larger, purer and permanent supply of water for the city of Cohoes," and to amend an act entitled "An act to provide for a supply of water in the village of Cohoes," passed April 12, 1856, and the amendments of the same, passed May 17, 1883.

452. (Senate.) Introduced by Mr. Thacher :

An act in addition to and amendatory of the several acts relating to a supply of water in the city of Albany.

453. Introduced by Mr. Moore :

An act to enable steam railroad companies having a terminus at the harbor of New York, incorporated under the Laws of the State of New York, to own boats and operate ferries.

454. Introduced by Mr. Moore :

An act to amend chapter 618 of the Laws of 1881, entitled "An act to constitute a separate road district in that portion of Northfield lying outside of the village of Port Richmond."

455. Introduced by Mr. Ely :

An act to provide for the better protection of the public lands of the State, and for the appointment of foresters.

456. Introduced by the Committee on Public Lands :

An act for the appointment of a commissioner of the Adirondack forest, and to define his powers and duties.

457. Introduced by Mr. Nelson :

An act to amend an act entitled "An act in relation to the weights and marks on casks and packages containing butter," passed April 24, 1865.

458. Introduced by Mr. Howland :

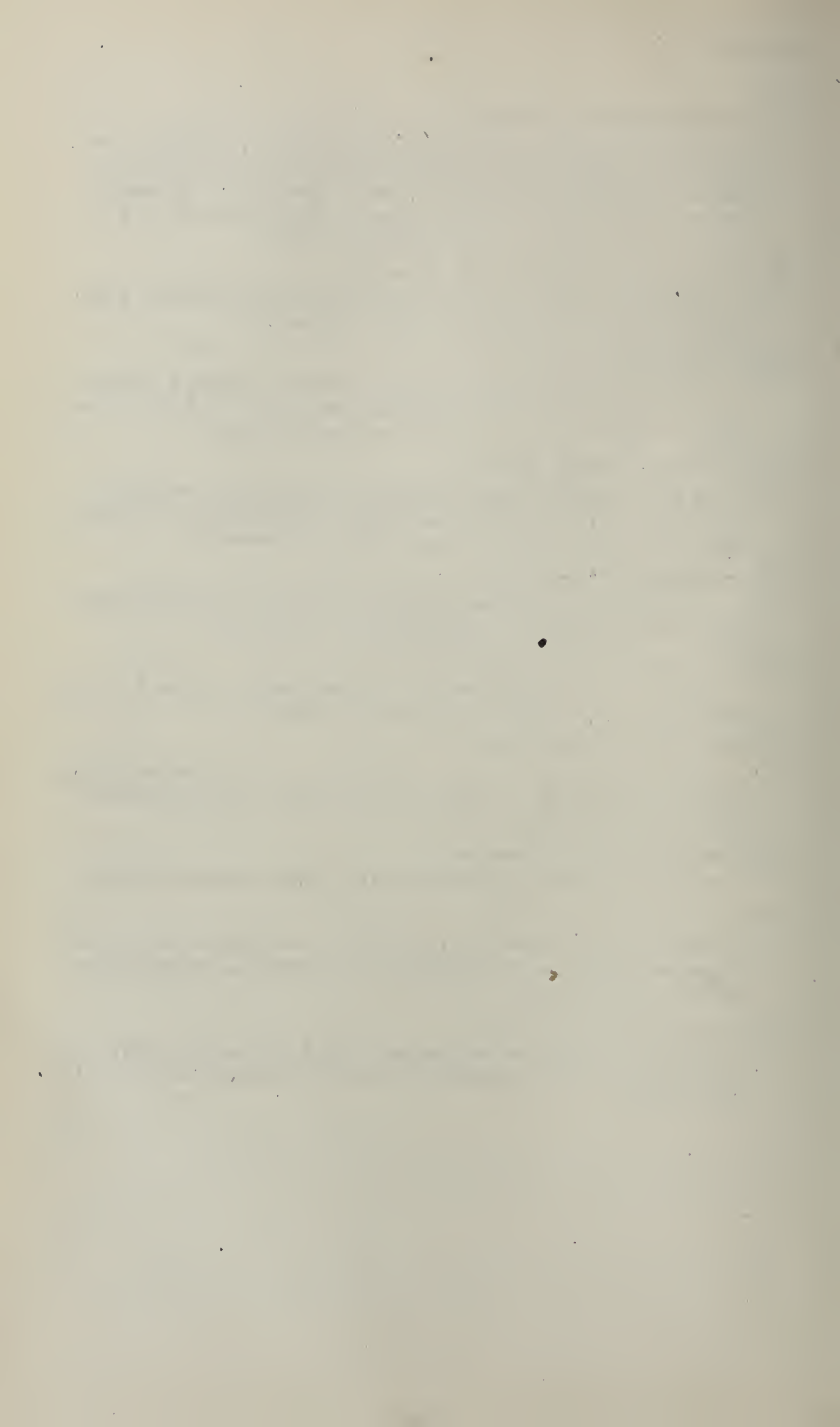
An act to prevent obstruction of the highways by snow drifting.

459. Introduced by Mr. Howe :

An act to provide for a commission to investigate and report upon the subject of prison labor, and to make an appropriation for the expense thereof.

460. Introduced by Mr. Erwin :

An act to further amend chapter 868 of the Laws of 1872, entitled "An act to incorporate the United States Loan and Security Company."



STATE OF NEW YORK.

No. 122.

IN ASSEMBLY,

MARCH 14, 1884.

LIST OF SPECIAL ORDERS.

Tuesday, March 18, 1884. Int. 671. Introduced by Mr. Howe:

An act to provide for a commission to investigate and report upon the subject of prison labor, and to make an appropriation for the expense thereof.

Thursday, March 20, 1884. Immediately after reading of journal:

Canal appropriation bills, introductory numbers 330, 331, 332, 333, 334, 335.

Wednesday, March 19, 1884. Immediately after reading of journal:

Bill reported from Committee on Ways and Means, entitled "An act making appropriations for certain expenses of government, and supplying deficiencies in former appropriations.

Friday, March 21, 1884. Immediately after reading of journal:

Senate bill number 134, entitled "An act to provide for furnishing an increased supply of water for the city of Brooklyn."

[Assem. Doc. No. 122.] 1

STATE OF NEW YORK.

No. 123.

IN ASSEMBLY,

MARCH 14, 1884.

LIST OF GENERAL ORDERS.

G. O.

461. Introduced by Mr. McDonald :

An act to lay out and establish a permanent exterior street along a portion of the East river in the city of New York, and to alter the map or plan of the city of New York to conform thereto.

462. Introduced by Mr. Pratt:

An act to further amend an act entitled "An act to amend chapter 143 of the Laws of 1861, entitled 'An act to amend and consolidate the several acts in relation to the charter of the city of Rochester, and to consolidate therewith the several acts in relation to the charter of said city.'"

463. Introduced by Mr. Van Allen :

An act to repeal certain acts and parts of acts therein named so far as the same relate to or apply to or within the city and county of New York.

464. (Senate.) Introduced by Mr. Gibbs:

An act to amend section 15 of title 9 of chapter 519 of the Laws of 1870.

465. Introduced by Mr. Tremper :

An act to amend chapter 582 of the Laws of 1880, entitled "An act to provide for excavating and tunneling and bridging for transportation purposes within villages and cities of this State."

466. Introduced by Mr. Darragh:

An act authorizing the construction of a draw-bridge over Newtown creek, in Queens county.

467. Introduced by Mr. Hodges:

An act to establish the pier line on the Brooklyn shore of East river, between Bushwick and Newtown creeks.

G. O.

468. Introduced by Mr. Pierson :

An act to revise and amend chapter 110 of the Laws of 1864, entitled "An act to amend the charter of the village of Newark," and the several acts amendatory thereof.

469. Introduced by Mr. Ely:

An act to regulate the sale at public auction of goods, wares and merchandise in unincorporated villages.

470. (Senate.) Introduced by Mr. Low :

An act to amend chapter 128, Laws of 1876, passed April 14, 1876, entitled "An act to amend chapter 46 of the Laws of 1872, entitled 'An act to amend an act to amend and consolidate the charter of the village of Middletown,' " passed March 21, 1866.

471. Introduced by Mr. L. R. Locke:

An act to provide for, and define the public or legislative printing.

472. Introduced by the Committee on Ways and Means:

An act making appropriation for certain expenses of government and supply in deficiencies in former appropriations.

473. Introduced by Mr. Clinton:

An act making an appropriation for the payment of the interest on the canal debt for the fiscal year commencing on the 1st day of October, 1884, and reappropriating money for the reimbursement of the principal of said debt.

474. Introduced by Mr. Clinton:

An act imposing and levying a tax of thirty-four one hundredths of a mill per dollar of valuation for the annual contribution to the sinking fund for the payment of the principal and interest of the canal debt for the fiscal year beginning October 1, 1884.

475. Introduced by Mr. Clinton :

An act to provide the means, and making the appropriations to pay the expenses of superintendence, ordinary repairs and maintenance of the canals for the fiscal year commencing on the 1st day of October, 1884.

476. Introduced by Mr. Clinton:

An act appropriating money to pay certain awards made by the Canal Appraisers and the Board of Claims with the interest thereon, and to pay counsel and witness fees, employed and subpoenaed in behalf of the State.

477. Introduced by Mr. Clinton:

An act reappropriating money for the payment of sums for new work and extraordinary repairs on the canals, and to pay the certificates and drafts issued therefor.

478. Introduced by Mr. Clinton :

An act to reappropriate certain moneys in the treasury for the improvement of the Champlain canal and of the Glens Falls feeder.

G. O.

479. Introduced by Mr. Pratt:

An act in relation to the appointment of bridge tenders on swing or lift bridges in the city of Rochester.

480. Introduced by Mr. Baker:

An act in relation to the appraisal of canal claims against the State.

481. Introduced by Mr. Pierson:

An act to authorize the construction of a bridge over the Erie canal at Morton street in the village of Newark.

482. Introduced by Mr. Garbutt:

An act to provide for the construction of waste gates and spill-way in the north embankment of the Erie canal in the village of Spencerport in the county of Monroe.

483. Introduced by Mr. Scott:

An act to amend an act entitled "An act to incorporate the village of Mount Morris," passed May 2, 1835, and the several acts amendatory thereof, and to consolidate the same, and to incorporate therein certain sections of an act entitled "An act to provide for the incorporation of villages," passed December 7, 1847, and the several acts amendatory of such sections, and to further alter and amend said acts as heretofore amended and hereby consolidated.

484. Introduced by Mr. Dimmick:

An act to amend chapter 413 of the Laws of 1877, entitled "An act to prevent frequent changes of text-books in schools."

485. Introduced by Mr. Roosevelt:

An act to amend an act entitled "An act to secure to children the benefits of elementary education," passed May 11, 1874, and amended by chapter 373 of the Laws of 1876.

486. Introduced by Mr. Clapp:

An act to amend section 5 of title 11 of an act to revise and consolidate the general acts relating to public instruction," passed May 7, 1864.

487. (Senate.) Introduced by Mr. Gilbert:

An act to amend section 50, title 7, chapter 555 of the Laws of 1864, entitled "An act to revise and consolidate the general acts relating to public instruction, and the acts amendatory thereof and supplementary thereto."

488. (Senate.) Introduced by Mr. Fassett:

An act authorizing the Comptroller to pay into the keeping of the trustees of the Elmira Female College the Elmira Female College Educational Fund.

489. Introduced by Special Committee:

An act to provide for a more efficient government of the department of parks in the city of New York.

G. O.

490. Introduced by Special Committee :

An act in relation to the office of the clerk of the city and county of New York.

491. Introduced by Special Committee :

An act to provide for and regulate the expenses of conducting the office of the clerk of the city and county of New York.

492. Introduced by Special Committee :

An act to repeal chapter 503 of the Laws of 1883, entitled "An act to prevent the overcrowding of jails in the city and county of New York."

493. Introduced by Special Committee :

An act in relation to the office of the register of the city and county of New York.

494. Introduced by Special Committee :

An act in relation to the office of surrogate in the county of New York.

495. Introduced by Special Committee :

An act to abolish imprisonment for debt in civil actions.

496. Introduced by Special Committee :

An act to regulate and provide for certain expenses of conducting the office of sheriff of the city and county of New York.

497. Introduced by Special Committee :

An act to create the office of searcher for liens and sales in the finance department and Croton water bureau in the city of New York, and to regulate the duties thereof.

STATE OF NEW YORK.

No. 124.

IN ASSEMBLY,

MARCH 14, 1884

REPORT

OF THE STATE BOARD OF HEALTH IN RESPONSE TO
A RESOLUTION OF THE ASSEMBLY.

STATE BOARD OF HEALTH OF NEW YORK, }
BUREAU OF CHEMICAL ANALYSTS, }
ALBANY, *March* 14, 1884. }

To the Assembly of the State of New York:

In response to the resolution of your honorable body, requesting the State Board of Health to report upon the water-gas as now manufactured in New York and Brooklyn, the following is respectfully submitted:

REPORT.

The State Board of Health has made such inquiries as lay in its power, during the short period allowed for its report, and feels convinced of the correctness of the opinion of its board of chemists, who are and have been its professional advisers in matters pertaining to chemistry or chemical questions.

The Board would add, that the exact relation of danger in the respiration of water-gas, in its unconsumed state, when compared with other illuminating gases, is a matter that has not yet been determined. It cannot learn that the use or manufacture of water-gas is attended with any special danger.

The report of the board of chemists is appended on behalf of the State Board of Health.

[L. S.]

EDWARD M. MOORE,
President.

The following is the report of the board of chemists:

We are of the opinion that water-gas as manufactured and ordinarily used in New York city and Brooklyn is not more dangerous or detrimental to health than other illuminating gases.

G. C. CALDWELL,

E. G. LOVE,

S. A. LATTIMORE,

WILLIS G. TUCKER.

STATE OF NEW YORK.

No. 125.

IN ASSEMBLY,

MARCH 14, 1884.

REPORT

OF THE SPECIAL COMMITTEE APPOINTED TO INVESTIGATE THE LOCAL GOVERNMENT OF THE CITY AND COUNTY OF NEW YORK.

To the Assembly of the State of New York:

Your committee appointed to investigate the local government of the city and county of New York, under the resolution passed by your body January 15, 1884, do report as follows:

The first session of the committee was held on the 19th day of January, and since then we have sat in all nineteen days, often being in session without intermission from ten in the morning till five or six o'clock in the afternoon. As the resolution under which we were acting directed our attention especially to the department of public works we felt obliged to take up that department first, but we found that it was, at this time, being investigated both by the Senate committee of cities, and also by a special grand jury, and as the witnesses whom we wished to examine were before the former body, while the books and papers we wished submitted to us were in the custody of the grand jury, we found it absolutely impossible to continue our investigation into it, and accordingly turned our attention to other branches of the local government.

Our inquiries were mainly carried on with a view to seeing what evils of the present system were due to bad or defective laws, and to remedying these by drawing up and presenting such bills as we deemed would, if enacted into laws, most nearly meet the emergencies of the case, but we also found many abuses which were due not to the existence of bad laws, but to the non-execution, invasion or violation of good ones, and we have brought such cases to the notice of the proper prosecuting officers of the county and State — the corporation counsel, district attorney and Attorney-General — in order that the offender might be brought to justice, believing that the surest way of having a

law enforced is to have those who disobey it punished. Together with this report we submit nine bills for the consideration of the House; their adoption will not only result in doing away with many gross abuses, and in greatly improving the efficiency of the public service in the departments affected, but will also result in a direct saving to the city of at least two hundred thousand dollars a year from the time the laws go into effect, or, capitalizing this sum, four millions of dollars will have been saved to the city by this investigation.

We have thoroughly examined the offices of the register, county clerk, sheriff and surrogate, and have also taken a certain amount of testimony in relation to the departments of parks, of taxes and assessments, and of law. In hardly one office or department, irrespective of the political affiliations of the incumbents, did we find both honesty and efficiency; indeed, the whole government of the city and county of New York, so far as we examined it, seemed to be in a condition that was absolutely appalling; a condition that would not be possible for a moment if the majority of the voters were alive to the danger of their position, and were actuated by a proper public spirit; and in this connection we would like to say that the manner in which the best citizens of both political parties in the city of New York seem to hold themselves aloof from politics is deserving of the most unqualified censure. The testimony taken before us in relation to the *alleged* deals or arrangements by which the present mayor, and the *acknowledged* deals or arrangements by which the present president of the board of aldermen attained to their respective positions — and which deals or arrangements are thereby shown to be peculiar to no faction or party — casts a curious side-light upon New York politics, and shows with startling distinctness that under the present system the men who nominally hold the offices are not the ones who really exercise the power, but that the latter, on the contrary, are generally outside parties, who cannot be held responsible to the people for their deeds and misdeeds.

A brief synopsis of the testimony in relation to various offices examined, together with a statement of the irregularities found to exist in those offices, is herewith submitted, together with several bills designed to correct the existing abuses, and to establish a new system of government.

I.

THE COUNTY CLERK'S OFFICE.

Under existing laws the clerk of the city and county of New York is paid a salary of \$3,000, and in addition thereto is authorized to receive all the fees for searches.

All the clerks in his office are paid by the city salaries varying in amount from \$4,000, paid to the mechanics' lien clerk, down to \$450, paid to one of the recording clerks.

Many of the subordinate positions in the office were established by provisions in the Tax Levy Acts of fifteen years ago, and the salaries annexed to those positions have been paid to the incumbents ever since, without regard to the nature or extent of their duties or the amount of services actually rendered.

The result of this system has been, as was admitted by the county clerk and his deputy, to pay certain clerks and subordinates very much larger salaries than are allowed to other clerks and subordinates holding equally responsible positions and performing equally arduous duties.

Under existing laws it is made the duty of the county clerk to keep in his office books in which shall be entered the exact amounts of all fees, perquisites and emoluments received in his office from any source whatever, and to report monthly to the comptroller the exact amount of fees received by him, together with a detailed statement of the sources from which such fees were derived.

An examination of the records in the comptroller's office shows that the present county clerk, who took office January 1, 1883, and his predecessor, Mr. Butler, who served for three years prior to that date, as well as Mr. Butler's predecessor, Mr. Hubert O. Thompson, who served for seven or eight months, have complied with the requirements of the statutes as far as keeping books and making the required returns are concerned.

That, though the law on the subject is definite and concise, and though during all the times that the various county clerks already mentioned have been in office it was made their duty to pay over into the city treasury all moneys received by them from all sources except for searches, yet they have retained to their own use fees amounting in the aggregate to considerably over \$50,000, to which they have no right or title whatever, but which belong to the city; of this sum \$13,700 has been retained by the present incumbent, Mr. Keenan, and \$36,000 by his predecessor, Mr. Butler. We will advise the corporation counsel to bring suit to recover these sums.

An examination of the law shows clearly that the force of clerks and subordinates in the office, who are paid out of the city treasury, are paid their various salaries to perform duties for the public, for which certain fees are allowed, but which were intended to be solely for the benefit of the city.

On the other hand, the corps of searchers is paid by the county clerk out of his own pocket, and all fees received from this source belong to him.

The evidence shows clearly that during the year 1883 the present county clerk retained to his own use \$13,726.92, to which he had no right or title whatever, and which consisted of fees received in his office and paid to the salaried clerks for the performance of duties imposed upon them by law and which they were bound to perform.

The evidence also shows that Mr. Butler, Mr. Keenan's predecessor, retained during his term of office \$36,620.50, to which he had no right or title whatever; and we believe that the present practice is one that has obtained in the office during the terms of his various predecessors.

When questioned upon this subject the county clerk stated that he had been advised by counsel that he had a right to retain these moneys; that neither he nor his counsel were able to inform the committee under what law or authority these moneys were retained, and an analysis of the evidence shows that the only authority for such action was the authority of *precedent*, or, in other words, that he did "because his predecessor had."

The evidence further shows that the county clerk received for fees

paid for searches during the year 1883, \$90,059.81, and that his net income during that year, aside from his salary of \$3,000, was upwards of \$80,000.

Your committee is unanimous in the opinion that such a state of things should no longer be allowed to exist, and that the office should be made a salaried one. Under the present fee system the county clerk nets during his term of office the enormous sum of a quarter of a million dollars; a large part of this is not retained by him for his own use, but is turned over to the various political organizations which supported him for the position; in other words, this question of a million dollars becomes a gigantic campaign fund, and one of the most fruitful sources of political corruption that exists.

Your committee has therefore prepared two bills relative to the county clerk's office, one of which has reference to the county clerk himself and to the general system of the government of the office; and the other has been prepared with reference to the salaries and employment of the various clerks and subordinates in the office; and we would state here that there seems to be no question of the efficiency and honesty of the subordinates of the county clerk.

In the first of these bills your committee, in order to avoid any constitutional question, has provided that no change shall be made in the salary of the present incumbent during his term of office.

The same scheme of keeping books containing exact accounts of the fees received, and of making returns to the comptroller, is continued in force, and the liability in the case of any damage received by any person through a mistake, or carelessness in searching, is continued.

He is also required, so long as he remains in office and receives the fees, to employ a corps of searchers and to pay them himself.

The bill further provides that upon the expiration of his term of office, or upon the appointment or election of his successor, all the fees, perquisites and emoluments of the office shall belong to and be paid into the city treasury, and that his successor shall receive as his compensation a salary of \$15,000, in lieu of all fees, perquisites and emoluments.

Provision is made for his liability in certain cases, and he is required to give a bond to the people of the State for the faithful performance of his duties.

The act also provides what fees shall be paid for searching.

The second act, which relates to the salaries of the clerks and subordinate employees, is intended to do away with the present system, and to authorize the county clerk hereafter, subject to the action of the board of estimate and apportionment, to regulate the salaries and number of all his subordinates, in other words, to extend the system which now prevails with reference to all other departments, boards and offices of the city and county government, to the county clerk's office.

As the salaries of the various clerks and subordinate employees have already been fixed for the year 1884, and as the moneys to pay these salaries have already been appropriated, no change is to be made during this year, but hereafter, and in each succeeding year, the county clerk is directed to send in his yearly estimate of the amount required to run his office to the board of estimate and apportionment, and that

board is authorized to pass upon it, and deal with it in the same way in which it passes upon and deals with all other estimates made by the heads of the various city departments and county offices.

It further provides that during the term of the present clerk no appropriation shall be made for searchers, but that upon the appointment or election of his successor the same rule shall apply to searchers and their salaries as applies to the other clerks in the office.

The act repeals specifically section 1732 of the consolidated act, and all other acts or parts of acts which have heretofore been passed creating certain subordinate positions, and fixing the salaries of certain subordinates, and leaves with the county clerk, as the head of the office, full power to regulate the number, duties and salaries of his subordinates, subject to the action of the board of estimate and apportionment in fixing the amount to be paid for conducting the office in its entirety.

An examination of the powers of the board of estimate and apportionment, and their duties relative to appropriations will show clearly that under the present system of providing moneys for the payment of legal offices the scheme adopted by this bill is the only true and consistent one under the existing laws. If the bills we recommend are passed a saving will result in the city, in the county clerk's office alone, of at least eighty thousand dollars a year. Your committee feels obliged to call attention to the fact that, in spite of the enormous fees he received, the present county clerk showed a truly phenomenal ignorance of even the general routine of his office, admitting with great frankness that his duties as a local politician overrode his duties as county clerk.

II.

THE REGISTER'S OFFICE.

The present register, Mr. Reilly, went into office on the first day of January of this year, and had, at the time he was examined by the committee, been in office for less than one month; it was, therefore, difficult for your committee to ascertain from him what his office is really worth a year to the incumbent. But it appears clearly from the evidence that if subsequent months pay him as well as the month of January did his net income for the year will amount to between \$30,000 and \$40,000, and we believe the aggregate would be in reality greater by one-half than this sum, for your committee is of the opinion that the statement submitted by the register does not in reality show what the office is really worth to the incumbent.

For instance, the register received, according to his statement, during the month of January, \$10,773.36, and his expenses for that month amounted, according to his statement, to \$8,140.93, or at the rate of about \$100,000 a year, which seems to your committee to be greatly in excess of what the expenses of running such an office should fairly be.

If this be so it is clear that if the office was made a salaried one, and was conducted upon any thing like a business basis, and if the fees now allowed by law for searchers and for recording papers were paid into the city treasury the city would derive from this source alone a net income of at least \$75,000 or \$80,000 a year. This amount is

at present, as in the case of the county clerk, simply a huge corruption fund; thus the present register actually testified that he had "forgotten" whether he had spent over or under \$50,000 to get himself elected to the office which he now holds.

Under existing laws the register is, and has been for years required to keep exact accounts in books in his office of all fees received from any source whatever, and he is also required, at the end of each year, to prepare and transmit to the Secretary of State an exact statement of all fees received by him from every source, and a like statement as to his disbursements.

Of course, if such statements had been prepared by his predecessor, Mr. Docherty, or if the books in which Mr. Docherty had kept his accounts, and which by law must be kept open at all times to the inspection of the public in the office, could be found, there would be no trouble in ascertaining what the office was really worth to the incumbent, but, unfortunately, Mr. Docherty was obliged to leave the city on account of severe illness, and his books had been removed by him prior to the instalment of his successor; we are of the opinion that Mr. Docherty should be indicted for having failed to comply with the law in the two particulars noted.

The register's office, under existing laws, unlike the county clerk's office, is not supported in any way by the city. In other words, with the exception of certain copyists who are employed to copy old records, and for whom an appropriation is annually made, none of the clerks or subordinates in the office are on the city pay-rolls, but all the expenses of the office, including fuel and lights (but exclusive of books of record), are borne by the register personally. As far as we are aware, no accusation has been brought against the honesty or efficiency of the employees in the register's office.

The bill submitted by your committee relative to the register's office is a simple one, and as in the case of the first of the county clerk's bills, does not go into effect until the successor to the present register is appointed or elected.

As there are no salaries of subordinates to be regulated there was no necessity to prepare two bills, as in the case of the county clerk's office, but the same scheme for appointment of all subordinate employees in the register's office after the expiration of Mr. Reilly's term, or upon the election or appointment of his successor, and for fixing their salaries is provided for in the act herewith submitted.

The office is also made a salaried one. The register is required to give a bond; all fees received in the office are declared to be the property of the city; books of account must be kept of all fees received, and returns must be made, as in the case of the county clerk, monthly to the Comptroller.

III.

THE SURROGATE'S OFFICE.

The investigation into the conduct of this office has disclosed numerous irregularities and illegal practices which seem to have been carried on for years, both under the administration of the present surrogate and those of his predecessors; certainly, under the present in-

cumbent, the office has been largely run by his subordinates simply for purpose of blackmail on those unable to defend themselves.

The laws now in force regulating that office seem to your committee to be capable of but one construction, and your committee is unanimously of the opinion that under existing laws neither the surrogate nor any of his subordinates or assistants are authorized to receive or retain any fees for services performed, except as provided in section 2567 of the Code of Civil Procedure, and such fees consist

1st. Of charges which the surrogate can make for expenses in travelling, at the rate of ten cents a mile, when he is obliged to transact business away from his office, and

2d. Ten cents a folio for copies of records made in the office by any of the subordinates at the request of attorneys or others, which latter fees belong to the city, unless by resolution of the board of aldermen, the clerk is allowed to retain them to his own use.

Your committee is clearly of the opinion that it was not the intention of the Legislature to allow any other fees to be received in the office for any purpose whatever, and that any moneys received or fees collected in the office, for any other purpose than those already specified, were received or collected without authority of law.

It appears that the surrogate himself has never charged any fees as mileage for services performed outside of the office, and it also appears that the board of aldermen passed a resolution some years ago authorizing the clerk of the surrogate's court to receive to his own use fees for copying records, at the rate of ten cents a folio.

This resolution was vetoed by the mayor and was never passed over his veto. But it is claimed by the surrogate that, notwithstanding these facts, the resolution was sufficient, without the approval of the mayor, to authorize the collection of the fees; but this your committee does not believe to be the right construction of the law.

If the fees of copying records were the only ones which had been received in the office by the subordinates it might, perhaps, be claimed that such fees had been received *under color of right*, and that the question of the validity of the ordinance was one to be settled by the courts; but the moneys received from this source and under the assumed authority of that resolution are only a drop in the bucket; for the evidence shows that it has been the custom in the office for years for the subordinates to receive and exact pay for almost every service performed by them of any kind or nature whatsoever.

The evidence shows that at least ten thousand dollars, and probably a sum vastly in excess of this amount, was received by the various clerks and assistants in the office during the year 1883, from all sorts of sources and for every description of service.

None of the clerks who received these moneys kept any account of them, except in one instance. It was, therefore, impossible for your committee to ascertain the exact amount received; and though, by the admissions of the different clerks, it appears that only about \$10,000 of illegal fees were collected, your committee has no doubt that the amounts actually received were in excess of that sum.

Under existing laws all the clerks in the surrogate's office are paid by the city, but, strange as it may appear, the surrogate himself, unlike other county officers, has no voice whatever in fixing the

number or the salaries of any of his subordinates, this power being lodged solely in the board of aldermen; and the board of estimate and apportionment is obliged, upon the resolution of the board of aldermen, to appropriate moneys sufficient to pay whatever salaries the common council see fit to adopt for an unlimited number of employees.

Another curious and unique feature in the present system is this — that the board of aldermen have power to name a successor to the surrogate for the balance of his term, should his office for any cause become vacant before the full term has expired.

Your committee, after a very careful examination of the subject, are unanimously of the opinion that all powers over the number and salaries of the subordinates in the office should be taken away from the board of aldermen and lodged in the surrogate himself, subject to the same restriction now imposed by law upon all other heads of departments in the city, and subject to the same limitations as have been imposed upon the county clerk and register in the bills now presented relative to those offices.

Your committee is also unanimously of the opinion that the power to fill vacancies in the office should be taken away from the board of aldermen and lodged in the Governor, who should have the same powers with respect to the surrogate that he now possesses with respect to other judicial offices.

The evidence also shows that a system has grown up in the office which, whatever it may have been originally, has certainly now become a source of wrong and injustice, namely, the granting of special privileges to certain persons not officially connected with the office, but who are allowed desk room, and who are permitted to perform certain services for the public at large and to exact from the public therefor amounts greatly in excess of what the services are really worth. The injustice resulting from this is greatly aggravated by the fact that those having dealings with the surrogate's office, of whom over a half are utterly acquainted with the law, are led to believe, by the circumstances of the case, that these persons are officially connected with the surrogate's office and have official warrant for the charge they make.

This system, in the opinion of your committee, should be abolished, and no such special privileges should hereafter be allowed.

No better example of the natural outgrowth of a system which permits salaried employees to receive fees to their own use can be afforded than that shown by the state of affairs in the surrogate's office to-day, when it appears that it is almost impossible in that office to have any routine work done without paying liberally for it; or, in other words, it is necessary to bribe the employees before they will perform the duty required of them by the law. It is, perhaps, true that the members of the legal profession are largely to blame for allowing this system to prevail, but when we consider the fact that more than half the dealings in the surrogate's office are directly with individuals interested in estates, that is, with widows and orphans, who do not employ lawyers and who have no means of knowing what the law is as to fees, the rottenness of the system becomes even more apparent, and enables the subordinates in the office to charge laymen whatever they see fit for performing the very services they are paid to perform.

In order to obviate and, if possible, eradicate this system, your committee have deemed it advisable to insert a provision in the proposed law requiring the surrogate to post notices in his office to the effect that no subordinate is authorized to accept a fee for any services rendered.

Great care has been taken by your committee, in the preparation of all of these acts, to see to it that all acts conflicting with the provisions of the proposed laws have been repealed.

As the surest way of preventing a recurrence of the exacting and receiving illegal and extortionate fees on the part of the surrogate's employees in the future, is to see that those who have been guilty of so doing in the past are punished, we intend to lay before the district attorney, for use by the grand jury, the evidence taken before us in reference to the fees received by the clerks and other employees in the surrogate's office, which evidence, we believe, warrants the indictment of the persons implicated. And the committee feel constrained to say that the illegal and extortionate practices prevailing among the subordinates can only be explained upon the ground of gross negligence upon the part of the surrogate, or else by his actually conniving at what took place among his subordinates.

IV.

THE SHERIFF'S OFFICE.

The abuses in the sheriff's office, as disclosed by the evidence taken by your committee, are too numerous to admit of much more than a cursory mention in this report; and in preparing an act to remedy these abuses your committee have very carefully considered the system now in vogue under which, by color of law, the sheriff is enabled to receive to his own use, yearly, tens of thousands of dollars for performing services which in reality are performed for a very nominal sum.

The proposed act deals solely with that branch of the office in which duties are performed which devolve upon the sheriff and which he is compelled by statute to perform for the benefit of the county, and for which he is, under existing laws, authorized to receive a fair and reasonable compensation from the county.

No change whatever is to be made in that branch of his office which deals with the enforcement or serving of processes, and which, in his testimony, he called the "*civil*" branch, as distinguished from the other.

No change whatever has been made in the amount of fees to be received by him, nor in the services which he is required to perform and for which provision is made in the Code of Procedure. These fees are to remain as now fixed by law, and the sheriff is to continue to receive them to his own use.

The abuses which have been shown to exist in the "*civil*" branch of his office will appear when the testimony is printed; in brief, they consist in repeated and flagrant instances of blackmail. They have been known to exist for years, and the remedy is, in a great measure, in the hands of the legal profession, whose members could, your committee believes, by making a bold stand and by seeking relief in the courts, do away with them to a very great extent.

The object of the proposed act, however, is to protect the city treasury and to relieve the tax payers from contributing thousands of dollars yearly to fill the capacious maw of the sheriff, or the treasury of the party or hall which he may happen to represent.

In this respect the sheriff's office is radically different from all the other feed county officers, and the difference is this : In his case the public at large is compelled to pay him yearly for services which it costs the sheriff almost nothing to perform, and which services are, if at all, only indirectly for the benefit of the public, while in the case of the other feed officers the fees are never paid except for services rendered at the request of individuals who know what the legal charges are and who need never pay more than the legal fee.

Under existing laws the sheriff is entitled to receive, in addition to the fees allowed by the Code for services in the "*civil*" branch of his offices, certain *fixed* and *specific* sums for summoning grand juries, for drawing panels of petit jurors, for conveying insane convicts to and from State prisons, etc.

No change is proposed by your committee in any of these fees or allowances.

In addition to the fees which are specifically fixed, the sheriff is authorized to receive a reasonable compensation for performing certain other services required of him by law and for which he looks to the county for his pay.

He is required to make returns monthly, to the Secretary of State, of all convictions in the criminal courts in this city, for which he is to be allowed a *reasonable* compensation, to be fixed by the board of aldermen.

This work, which consists of filling in printed blanks and which can easily be performed by one ordinary clerk at a salary of not more than twelve or fifteen hundred dollars a year, was performed last year by the sheriff at a cost to the city of \$26,299. The board of aldermen having fixed the "*reasonable compensation*" for this service at fifty cents for each conviction reported.

The sheriff is also required to convey prisoners from the city prison to the courts and back, and also from the city prison to Blackwell's island and Randall's island ; and for these services he is authorized to receive a reasonable compensation, to be fixed by the board of aldermen.

The evidence shows that all these prisoners are transported by the sheriff in a van, which, with the horses, cost under one thousand dollars. A driver and one or two deputy sheriffs accompany the van to and from the prison whenever prisoners are carried.

The only expenses connected with this service necessarily consist of the wages of the driver and deputies and the feed of the horses ; and your committee is of the opinion that \$5,000 per annum would be a very liberal allowance and would more than cover the sheriff's outlay for this work.

Yet the sheriff received, during the year 1883, \$23,109 from the county for conveying prisoners alone, through the liberality of the board of aldermen in allowing him, as a reasonable compensation, \$1.75 a head for each prisoner conveyed.

The absurdity of this allowance can be better appreciated when it is

known that the distance from the city prison to the courts is about six city blocks, or less than half a mile.

Again, by chapter 251, of the Laws of 1875, the board of aldermen is authorized to contract with the sheriff for the support of civil prisoners confined in the county jail, and that liberal body, with utter disregard of their duties, adopted, in the year 1876, a resolution by the terms of which the sheriff is authorized to charge seventy-five cents a day, or at the rate of five dollars and twenty-five cents a week, for feeding each prisoner; just double the rate paid in the tombs prison for the support of prisoners.

The sheriff was paid by the county, for feeding prisoners during the year 1883, \$29,139; more than half of which was, undoubtedly, clear profit.

Again, it is made the duty of the sheriff to serve notices upon petit jurors in the county, for which service he is authorized to receive a reasonable compensation.

The evidence shows that at thirty-five cents for each notice served, during the year 1883 (the rate allowed by the board of aldermen), the sheriff received from the county \$6,672.

To perform this work the sheriff employed five clerks, who received for their services \$3,048.89, or less than half the sum actually paid out of the treasury; and your committee believe that the work could have been easily performed for a still smaller amount.

In addition to these liberal allowances the sheriff, by the grace of the board of aldermen, is given about six hundred dollars whenever a person is hung.

This sum is exclusive of all necessary expenses, which amount at each hanging to several hundred dollars more.

To sum up, the sheriff was paid, during the year 1883, \$85,119, for performing services for which by law he was authorized to receive a "reasonable compensation," whereas your committee believe that \$25,000 would be a very liberal allowance under the circumstances.

In other words, your committee are unanimously of the opinion that the tax payers of New York city were forced to pay the sheriff sixty thousand dollars, during the year 1883, over and above the amount which, under any fair interpretation of the law, by the board of aldermen, he should have received; and if the bill we present becomes a law we believe it will ensure a saving to the tax payers of about fifty thousand dollars.

The investigation of this office has shown, however, that, notwithstanding the liberal allowances made by the board of aldermen for these various services, there has been a constant attempt on the part of the sheriff's officials to charge, at these liberal rates, for services which were never performed, or in other words, to rob the city treasury on all occasions.

It was clearly shown that, in the item of transportation of prisoners alone, there was a clean steal of about four thousand five hundred dollars for the past year; it further appeared that in charging for the support of prisoners in jail one day's board was deliberately and consistently charged in each case in excess of the time that each prisoner actually remained in jail; and that though the law requires that no prisoner shall be supported by the county, unless he takes an oath that

he is unable to support himself, the prison authorities, in utter disregard of the law, have habitually charged for prisoners who never took any oath whatever, though the warden of the jail is obliged to make affidavit every month that all the prisoners charged for have taken an oath that they are unable to support themselves.

It is certain that a large part of the money received by the sheriff for the support of prisoners during the year 1883, was obtained without color of right and upon fraudulent vouchers verified by the warden and by the sheriff.

An examination into the condition of Ludlow street jail, and into the system upon which it is run, has disclosed a most revolting and almost incredible state of affairs.

Suffice it to say upon this subject that, what with drunken and brutal keepers and a thorough system of extortion and blackmail on the part of the prison authorities, imposed upon those prisoners who are too poor to pay for favors which are liberally extended to those who can pay, the existence of such an establishment, conducted upon such a pernicious system, is a foul blot upon the city and State, which in the opinion of this committee, the proper authorities should make it their business to wipe out at once.

The sheriff's bill has but one object, viz. : To take away from the board of aldermen the power of fixing the sheriff's fees for services for which under existing laws he is allowed to receive a "*reasonable compensation*," and lodge this power in the board of estimate and apportionment, where, under the present system, it rightly belongs.

No question of constitutionality can successfully be raised should the bill be passed, because the only effect of its provisions will be to change the body or board which is to fix the reasonable compensation to be allowed the sheriff, and in no way to take away his right to such reasonable compensation.

This is exactly as it should be, and if the board of estimate and apportionment does its duty, there will probably result a saving of fifty thousand dollars annually to the city of New York.

Your committee desires to call attention to the fact that the same general scheme has been observed in all the proposed acts relating to the sheriff, county clerk, register and surrogate ; and it has been our intention by these bills to lodge in the board of estimate and apportionment the power, subject to certain restrictions, to estimate and appropriate the moneys necessary to maintain and carry on the various offices with reference to which these bills have been drawn.

Your committee has also reported a bill to abolish imprisonment for debt in civil actions, except in certain specified cases ; believing that imprisonment for debt, while it may occasionally work good, in a far greater number of cases works harm, and that it is one of the few surviving remnants of the barbarous system of law that prevailed during the last century.

We have also reported a bill repealing the act passed last year which allowed the sheriff to take prisoners from the tombs and keep them in Ludlow street jail ; this was a measure solely in the interest of the sheriff's pocket ; and the practical result has been that occasionally he has taken so many prisoners as to be obliged to confine three and four at a time in ill ventilated, dirty cells, eight feet by ten in size.

But no mere legislation will remedy all the evils existing in the sheriff's office ; there must also be a thorough and radical change in the men who have been chosen to execute the present laws.

The evidence submitted to us shows that the sheriff has in his possession moneys to which he has no possible title, and which were taken from the treasury of the city of New York by means of fraudulent vouchers sworn to by his subordinates ; he has benefited to the extent of thousands of dollars by their misdeeds ; and the conclusion seems inevitable that these misdeeds were committed by his instigation, or with his connivance. Many of his subordinates and deputies, including most of those in Ludlow street jail, are plainly shown to have been guilty of the most outrageous blackmail and extortion upon the unfortunate beings with whom they were by the nature of their duties, brought into contact ; in addition to which, several of them have assisted the sheriff to obtain from the city treasury moneys to which he had no possible title. All of the evidence relating both to the sheriff and his subordinates, will be laid before the grand jury, in order that they may take appropriate action upon it.

V.

THE DEPARTMENT OF PARKS.

Your committee had but the briefest examination of this department ; yet enough was developed to show that the chief characteristics displayed in its management were extravagance and inefficiency. The commission is four-headed, and the president, who is elected by the board, is the only one who has a salary ; as a consequence, the board remained unorganized for two years, each member persistent — refusing to vote for any one except himself for president ; and it was only organized at last by the adoption of the curious expedient of a rotary presidency, each member, the Republicans as well as Democrats, being elected in turn for a few months, to what one of them called, in the evidence taken before the committee, “the office of emolument and trust.” A more undignified squabble for the spoils of office has rarely been seen.

In addition to this, the department has been spending a continually increasing amount of money every year, without any proportionate benefit accruing to the city ; and indeed it has failed signally in performing some of the duties devolving upon it, such as furnishing maps of the annexed districts to the tax commissioners, etc.

We report herewith a bill to legislate out of office the present four commissioners, and to substitute in their place a single commissioner, to hold for two years, at a salary of five thousand dollars a year, who shall be appointed by the next mayor, on January 1, 1885.

VI.

TAXES AND ASSESSMENTS.

We had only time to begin an investigation into this department; yet some very damning disclosures were made. As in the surrogate's office, there is an unattached auxiliary body existing as a half recognized bureau in the department. This contains a number of men who do the searching into real estate, and who, having a practical monopoly of the business, and not being held responsible to anybody, can charge what they choose, and perform their work in any manner they please. The grossest inequalities prevail in the manner of assessing real estate. The assessor who has in charge the assessing all the immensely valuable property in the first ward, was appointed by the president of the commission, confessedly without any examination as to his capacity to perform the duties of his office; and this same assessor, when questioned as to the method by which he arrived at the value of any given lot of land, was finally forced to admit that it was by means of "that intuitive consciousness that God gives us all."

The committee did not have time to go deeply enough into this department to be able to do more than report a bill to remedy the evils in relation to the bureau of searchers; there were other evils whose existence was hinted at rather than fully developed by the small amount of evidence laid before us.

In conclusion we would say that information has been furnished us tending to show that some of the remaining departments in New York are in a condition fully as bad as is the case with those departments that we have examined.

(Signed)

THEODORE ROOSEVELT,
Chairman.

WM. T. O'NEIL,
GEO. Z. ERWIN,
THOS. V. WELCH,
HARTFORD D. NELSON.

STATE OF NEW YORK.

No. 126.

IN ASSEMBLY,

FEBRUARY 28, 1884.

ANNUAL REPORT

OF THE

SUPERINTENDENT OF THE ADIRONDACK AND STATE LAND SURVEYS.

To the Honorable TITUS SHEARD, *Speaker of the Assembly*:

Sir — Pursuant to chapter 370 of the Laws of 1878, and chapter 499 of the Laws of 1883, I have the honor to submit the accompanying reports on the progress of the surveys and the location of the public lands in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence and Warren, to the Legislature.

Very respectfully yours,

VERPLANCK COLVIN,

Superintendent.

NEW YORK STATE LAND SURVEY.

ACCOUNT CURRENT.

1883-1884.

Dr.

By appropriation, under chapter 499 of the Laws of
1883..... \$15,000 00

Cr.

By account of expenditures on State Land Survey,
rendered to the Comptroller, with vouchers there-
for, December 3d, 1883..... \$7,722 39

By account of expenditures on State Land Survey,
rendered to the Comptroller, with vouchers there-
for, on February 28th, 1883..... 5,646 50

By outstanding bills, accounts rendered, wages paya-
ble to men at close of work and other work in pro-
gress..... 1,631 11

Total..... \$15,000 00

ALBANY, *February 29th*, 1884.

The foregoing is a correct abstract of the accounts of expendi-
tures upon this Survey. The field expenses of the several sections
or divisions of the work were in each department from \$700 to
\$1,600. The details, with bills showing each and every item, will be
found in the office of the Comptroller. No allowance for salary or
compensation has been made to the superintendent.

VERPLANCK COLVIN.

Superintendent.

REPORT

ON THE PROGRESS OF THE SURVEY OF THE STATE LANDS.

To the Honorable the Legislature of the State of New York:

The work of the Adirondack survey, circumscribed by the limited appropriations, during the past season, has been confined to the preparation of maps, the arrangement of data and computations, and the supervision of the engraving of the maps and plates contained in the large volume of reports transmitted to the last Legislature.

My personal attention was withdrawn from these office duties by the passage of the act of June 2d, 1883 (Chap. 499 of the Laws of 1883), by which the location and survey of all the various detached portions of "State lands in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence and Warren," were placed under my direction. In accordance with this law I have the honor to submit the following

REPORT.

In order that the work accomplished may be understood, it is necessary to give an abstract of the requirements of the law directing the survey of the State lands in the counties mentioned.

The first section directs the Superintendent of the Adirondack Survey to make surveys showing the location and area of the lands.

It also requires that this new work shall be connected with the surveys of the interior.

It further requires that the position of such lands shall be shown upon a map or maps.

The second section of the law directs that "the methods of survey shall be in accordance with those now in use on the Adirondack Survey" and that copies of all maps relating to such State lands

shall be filed in the office of the Comptroller and State Engineer and Surveyor, and that the Superintendent shall, within sixty days after the meeting of the Legislature, render a report to the Legislature of the results of the work.

In order to carry out the provisions of the law, I commenced on the 4th of June, 1883, the organization of the Survey parties.

One general principle was adopted as a rule governing every section of the work of the Survey, in the restoration of the boundaries :

The re-discovery of the original lines and corners, as identified by means of the original line marks and proved by witnesses, both by indisputable oral and documentary evidence;

The re-marking and monumenting of none but the original lines, of patents tracts or lots, separating and eliminating them from the more recent and erroneous compass lines.

In advance of the actual field work it was necessary to obtain a list of the lands owned by the State as recorded in the books of the Comptroller. Application was therefore made to the Comptroller for an abstract of the State lands then recorded, and upon the receipt of this abstract, the approximate location of the several tracts, pieces and parcels of land in the counties mentioned in the law was studied upon the preliminary maps of those counties, which had been prepared during the preceding survey of the wilderness.

The area of the several pieces thus recorded as State property was found to be more than five hundred and seventy-three thousand acres, nearly all in detached portions, except those interior townships heretofore located.

It was found that the Comptroller and the officers of the Tax Department were unable to locate many pieces of State land, owing to the uncertainty and the obliteration of the boundary lines, and that valuable timber was in different places being removed from the State lands without the authorities possessing the power to prevent it or to prove the trespass or punish the offenders.

The State lands, therefore, whose boundaries were most uncertain and, in consequence of suspected trespass, most required to be located by survey, were held to be the tracts which deserved the most immediate attention, and the following letter was, therefore, addressed to the Comptroller :

STATE OF NEW YORK:

ADIRONDACK SURVEY OFFICE, }
ALBANY, *June 12th, 1883.* }

HON. IRA DAVENPORT,

Comptroller:

SIR—In accordance with the provisions of chapter 499 of the Laws of 1883, I am directed to make surveys, showing the location and area of the different detached portions of the State lands in all of the north-eastern counties of the State—the work to be done in accordance with the methods now in use on the Adirondack Survey.

In entering upon this work, I would request, that if any particular portions of the State lands, in your judgment, require immediate survey, you will call my attention to the same, and direct your deputy and the chief of the tax department to furnish me with such memoranda as will enable me to take up these special surveys at an early day.

Very respectfully yours,

VERPLANCK COLVIN,
Superintendent.

The following communication was received, in reply, from the Comptroller:

STATE OF NEW YORK:

COMPTROLLER'S OFFICE, }
ALBANY, *June 18th, 1883.* }

VERPLANCK COLVIN,

*Superintendent N. Y. State Adirondack Survey,
Albany N. Y.:*

SIR—Yours of the 12th inst. was duly received. In reply thereto I will state, that it is deemed of great importance that, pursuant to the provisions of chapter 499, Laws of 1883, the following surveys should first be made by you, viz.:

First. One definitely establishing the outlines and dimensions of township 5, Old Military Tract, Clinton county, and of each of its subdivisions. A map should be made of the same, showing the location, dimensions and acres of the numbered lots, both by the old and the new survey, the line between the towns of Dannemora and Ellenburgh, with the dimensions and acres of each new survey lot in each town, together with the dimensions and acreage of each part of each new survey lot covered by any old survey lot.

By all the papers and records to which we yet have access, it appears that the whole of said township 5 was by the new survey divided into thirty lots in width from E. to W., and ten lots in length from N. to S., and we further find that a copy of said new survey map was filed in the Clinton county clerk's office prior to the year 1835. The importance of the survey and map required, which is greatly needed, can hardly be overestimated, as the "Prison Lands," so called, consisting of about ten thousand acres, are located in said township, and cannot now be accurately located or described, either for sale or the prosecution of supposed trespassers thereon, owing to conflicting maps and irreconcilable discrepancies. As matters now stand, it is "confusion worse confounded," for not a piece of land therein can now be accurately or reliably described.

We further suggest that in order to make said maps of still greater value and service, the lands in said township "from which the timber has been removed," be faithfully designated by coloring, or by some topographical mark which you may adopt, and that the lakes, streams, roads, and the general topography of the land be also plainly designated thereon.

Second. One of the north lines of the Jerseyfield Patent, the accuracy of the location of which has been called in question, and on which depends the location of a very large quantity of State Land. At present we locate said lands by lines heretofore run, and recognized as authoritative; but if, as claimed, they are widely out of place by reason of the erroneous location of the north line of said patent on which they are based, such error, owing to the rapid felling of the forests in that section, cannot be too quickly rectified and the true line too firmly established.

Third. Said chapter authorizes only a survey of State Lands. The State owns no land adjoining the line between Lewis and Herkimer counties, but if, in your opinion, the accurate location of the line between Hamilton and Herkimer counties, and of the large quantity of State Lands bordering on and adjacent thereto, depends on the location of said Lewis and Herkimer county line, or if you are of the opinion that said chapter will authorize your survey thereof, then and in such case, we call your attention to the great importance, by the plan indicated, of obtaining the correct location of said line between said counties of Herkimer and Lewis.

Respectfully yours,

IRA DAVENPORT,
Comptroller.

Upon the receipt of this communication I caused thorough searches to be made through the different State Departments for all ancient records relating to the old land patents, which I thought would aid in determining the manner in which the re-survey and re-location of these important boundaries should be undertaken. Research was also made for the original grants, deeds and descriptions of all of the tracts in the several counties wherein State lands were situated, and extracts made from all records which might aid in identifying the boundaries. It was soon apparent that the records were both imperfect and conflicting, the Colonial and early State records differing very materially in the description of what should have been identical boundaries. These differences or errors were thought by many to be proof of the absolute falsity of the Colonial surveys. This was not, however, my opinion. From long acquaintance with the ancient compass lines I was inclined to believe that the differences in most old records arose from the hasty manner in which the surveys of that period had been made and the lack of observations of the variation of the magnetic needle. I had confidence that, where the original forest remained, if any line had been run and marked upon the trees as described in the original field notes, careful study of the topography of the section with search for such marked trees would not fail to reveal enough to identify them, even though the marks should have become ingrown deeply into the heart of the trees.

Upon the staff of the preceding survey I had been fortunate in securing a number of experienced forest surveyors, whose acquaintance with old marked lines rendered them of great value for such work. These men, being the inheritors of the woodcraft of, and acquainted with the methods pursued by the Colonial surveyors in marking the boundaries of the early patents and grants, were not only of service in tracing the lines, but as experts and local authorities as to such lines their services were needed to aid in proving and attesting the lines when found.

It was my intention to place the measurements and survey work under the modern system with the refined methods and instruments of the present day in the hands of skilful engineers, wherever transit or theodolite work should be needed to determine the real location of lines, or their connection — as was required by the law — with the surveys of the interior, but the retracing of lines of ancient marked trees required the presence of expert forest surveyors.

It was soon found that before it would be practicable to make any

complete plan for the field work over so vast an area — exceeding half a million of acres of wild land — it would be necessary to prepare diagrams or plans showing the approximate location of the several tracts of State land graphically upon paper, on which, side by side, by the use of variously colored lines the questionable boundaries and problems as to disputed corners, etc., could be given a preliminary study. This done, written instructions could be prepared for the guidance of the surveyors; these together with a tracing of the diagram of the plan of work, would be sufficient to guide the assistant in charge of any one of the many detached survey parties; which I soon found it would be necessary to place in the field.

Verbatim copies were also needed of the ancient field notes and records, in order to identify the marked trees with the original notes so as to compare the general description of the country and aid the search for the lost lines.

To do this work promptly a considerable clerical force was found to be necessary, and was immediately organized.

Clerks were sent to the offices of the Secretary of State, the State Engineer and Surveyor and the Comptroller, and papers and books, many of them long disused and discolored by age, were brought to light, copied and compared.

Some of these ancient documents were very curious and interesting, but they often failed to be intelligible, so that the work of copying them was, at times, a work of interpretation if not of translation.

The most toilsome research often failed to give any information, even of the date when the old patents were surveyed. This was a matter of great consequence, inasmuch as the boundary lines were originally run with the magnetic needle, and, in order to retrace such lines, it is essential that the date of the original survey should be known, to make the proper allowance for the change in the variation of the needle.

This preparatory work also included the repairing of instruments and the arrangement of camp equipments for the survey parties.

Many of the instruments, in being brought down from the icy ledges of mountain summits at the close of field-work the preceding winter, (December 1882), had been jarred and otherwise injured by breaking of cleats within their boxes and required thorough repairing.

In order to accomplish the field-work promptly, I found that it would be necessary to place a separate survey party in each county; and to tie the work together and connect it with the interior triangulation of the Adirondack Survey, twenty-inch and twelve-inch

theodolites would be required in the measurement of the larger triangles—the lands in Clinton county being over one hundred miles from those in Fulton county, and *only* to be connected by special triangles based upon the triangle sides of the Adirondack Survey. To do this in compliance with the law, which required that the “methods of survey should be in accordance with those now in use on the Adirondack Survey,” the large theodolites were needed and were placed in the hands of the instrument makers, Stackpole & Brother of New York, and improvements made in their construction from drafts which I prepared. These improvements made the instruments much more effective and the progress of the work more rapid.

The transit theodolites and solar transits were placed in the hands of W. & L. E. Gurley, of Troy, for thorough repair. Messrs. Gurley also had charge of all the smaller instruments, stadia rods, transit-staffs with tripods (adjusted by levels) and the compasses, used in searching for and retracing the old lines.

A great amount of correspondence was entailed by the complicated nature of the work. The State lands are adjacent to valuable tracts of private property, and owners were naturally much interested in the work of the survey. Many inquiries also had to be made as to private records, and a voluminous correspondence arose between the Superintendent and the resident Engineers as to the methods proper to be taken and the details of the work proposed in each of the ten counties. Some idea of the great labor involved in this portion of the work may be obtained from the fact that thousands of letters and dispatches were received, and that more than one thousand answers, dispatches and letters of instruction as to details of work were written by the Superintendent, copied and sent out, and recorded in a book of abstracts.

No portion of the work was taken up in the field, until written contracts as to rates of compensation had been made with the assistants and surveyors employed. Only by such means could exact estimates be made of the expense of the work, and its cost at any given moment be ascertained. The regular weekly reports of work done, expenses, and time and pay-roll, were in accordance with the Manual of the Adirondack Survey, required from each division, and greatly aided the Superintendent in watching and directing the progress of the work.

ORGANIZATION.

The subdivision and arrangement of the several sections of work was as follows:

The general direction by the Superintendent, aided by assistant M. Blake, in charge of office, and several clerks.

[Temporary clerks were employed in the office copying and arranging data preliminary to the field-work. Subsequently most of them took the field as rodmen, chainmen, etc.]

Thirteen survey and signal parties were placed in the field during 1883.

(1.) PRIMARY TRIANGULATION. (Connection of the detached surveys with the lines of the Adirondack Survey in the interior, so as to plat the same upon the maps.) Several counties. By the Superintendent.

(2.) SECONDARY TRIANGULATION. (Same object.) Several counties. M. Blake, in charge.

(3.) CLINTON COUNTY. (Old Military Tract, Township No. 5; Prison Lands, Dannemora; Chazy and Chateaugay Lakes. H. K. Averill, in charge.

(4.) FULTON AND HERKIMER COUNTIES. *First Section.* (South line of Vrooman's Patent, and Western part of Lawrence Patent, and Jerseyfield line. S. H. Snell, in charge.

(5.) Second section (Jerseyfield line to Glen, Bleeker and Lansing line), J. B. Koetteritz, in charge; G. Jones, line expert; L. Kelly, line expert.

(6.) LEWIS AND HERKIMER COUNTIES. (Restoration and location of ancient lines.)

S. H. Snell, in charge, after completion 1st section of Jerseyfield line.

(7.) HAMILTON COUNTY. (Totten and Crossfield's purchase, Moose River Tract, Benson and Lawrence Tracts, etc.)

J. Francisco, in charge; L. Kelley, associate surveyor on south line of Benson and Hamilton county line.

(8.) ST. LAWRENCE COUNTY. (Macomb's purchase, township of Granshue.)

S. B. Crandall, in charge.

(9.) ESSEX COUNTY. (Township 1 and 12, Old Military Tract, Totten and Crossfield purchase, Roaring Brook Tract, etc.)

G. L. Locke, retracing and monumenting lines under immediate direction of Assistant Blake.

(10.) FRANKLIN COUNTY. First section (Macomb's purchase). Connection of lines by S. J. Farnsworth, Assistant.

(11.) Second section. Boundary between townships 15 and 18 retraced under a special contract by S. Wardner.

(12.) WARREN COUNTY. Work limited to correction of bearings to true azimuths to facilitate the accurate preparation of maps of State lands.

In Saratoga county measurements were made locating boundaries of lots in Palmer's purchase as hereafter described.

Much topographical work was done and accurate leveling in various sections, where the altitudes were considered of importance. The leveling was done by Mr. N. L. Rush.

(13.) SIGNAL WORK. In the counties of Fulton, Hamilton and Essex, by signalman Brown; in Lewis county, by signalman Snell; in Clinton county, by signalman Sperry; in St. Lawrence, etc., by special contracts.

FIELD-WORK.

Before entering upon a detailed statement of the measurements made in each of the above mentioned sections, in the location of the lands, the following brief abstracts from my journal are given and seem to be necessary to show the manner in which the work was conducted.

By the 25th of June the contracts had been made, the repairs of the larger instruments, with the preparation of tents, etc., were all in progress, and the first survey party was placed in the field. The details of their work will be found in the account of the restoration of the first section of the Jerseyfield boundary line.

I remained with this party in their search for the initial point of the line and left them on the 28th inst., having set their work before them.

From June 28th to July 6th, the regular office duties at Albany, occupied my attention. On the evening of the 6th I proceeded to Little Falls and the following day reached Jerseyfield lake, on the boundary line between Herkimer and Hamilton counties.

From July 7th to the 11th, I gave close attention to the work of the survey party then on the north line of Jerseyfield. Their measurements were examined and tested, and instructions given for the extension of the work eastward, as more particularly explained in the section relating to the location of that line. July 12th and 13th were devoted to office work at the capitol.

On the evening of July 14th, I proceeded to Forestport on the Black river in Oneida county, which was appointed as the rendezvous of

the preliminary party directed to locate boundaries in the counties of Herkimer and Lewis. The 15th was Sunday.

On the 16th the preliminary party was organized and camp made near the west bounds of the county of Herkimer. The location of this county line requiring to be shown upon the maps, and being involved in doubt, was the first question taken up. Search was made by different sections of the survey party, and a plan finally adopted for the retracing of this line and its connection with the signal station of the Adirondack Survey, by which the true geographical position of the line and its connection with the land lines and allotments as desired by the Comptroller, would be obtained. I remained with this party until July 23d, when leaving them to trace the line and measure offsets to signal stations I returned to the capitol where telegrams and correspondence had accumulated.

On July 28th I returned to Herkimer county, where on the evening of the 29th I was rejoined by surveyor Snell and party at the village of Grant.

On August 4th the work of this survey party being well started, and over a mile of line run, I left them in charge of Mr. Snell, and proceeded across the county of Herkimer to Moorehouseville, in the county of Hamilton, reconnoitering sites for signal stations to connect the Herkimer county line with the work on the Jerseyfield line.

Observations of the sun were secured at Morehouseville with solar transit, and the variation of the needle found to be $8^{\circ} 24'$ west of true north. Lines supposed by original surveyors to be nearly on the true meridian, were found to be several degrees in error.

On August 6th, by way of Piseco and Oxbow lakes, I reached Lake Pleasant in Hamilton county, and ascertained the movements and progress of one of the signal parties that had been sent out.

On the 7th I reached Albany again, and resumed office work, being busied on the 8th and 9th with correspondence and making out drafts, to be forwarded to chiefs of parties to meet their running expenses.

August 10th my attendance was desired by the Senate special committee on State Lands, and between the 10th and 20th inst. I accompanied the committee in their examination of the lands through the counties of Warren, Essex, Hamilton, Franklin and St. Lawrence.

While aiding the committee in their work I was able to maintain the management of the survey parties in the several counties by telegrams and dispatches sent and received at Blue mountain, Saranac lakes and St. Regis, etc., and orders by special messengers.

August 22d I left the Senate committee and proceeded from Cranberry lake to Moosehead mountain on the Raquette to inspect the survey work in that section. This mountain I measured the same day, and from the signal station on the summit obtained angles connecting the survey work proceeding in the county of St. Lawrence under assistant Crandall with the Adirondack Survey triangulation.

August 23d, I ascended Bog mountain, which was to be the terminus of Mr. Crandall's transit line, connecting this survey of the State lands in Granshue, St. Lawrence Co., with the triangulation. Here I obtained angular measurements and determined the variation of the needle (North $5^{\circ} 59'.2$ West from the true meridian). Trigonometrical measurements were also made, the weather being at this time remarkably favorable, the atmosphere pure and clear after recent showers.

The work of the party on Bog mountain was inspected and instructions issued relating to the location of boundaries of State lands in the township of Granshue. The same evening I reached Colton, on the way securing an hour's work at one of the monuments of the survey and the azimuth of line by solar transit.

Early on the morning of the 24th, as it was bright and clear, the true meridian was determined in the village of Colton, and from magnetic observations the declination of the needle was found to be $9^{\circ} 29'.7$ West of true north. The same morning I reached Potsdam and found at the express office instruments and apparatus for Mr. Crandall's survey party for which I had telegraphed to assistant Blake at Albany. The boxes and packages were immediately forwarded to Mr. Crandall, and the same night I returned to Albany again, wearied with work, to find no rest. The amount of correspondence that had accumulated during this brief absence was very large and required detailed instructions in answer. The work of the several survey parties in Clinton county, in Fulton county, in Hamilton county, in Herkimer county, in St. Lawrence and in Essex counties each called for special instructions of greater or of less length — each desired my personal presence — nay, considered it absolutely essential to a clearing up of the difficulties relating to the old boundaries which they were retracing.

As these dispatches were constantly arriving from the different sections, my personal presence at all of these points was not practicable, and the necessary instructions, made as explicit as possible, were forwarded in writing.

These office duties occupied my attention between August 25th and August 30th.

On September 1st, I left Albany to inspect the work of several of the parties, and to connect the same by triangulation with my preceding surveys in the interior. I took with me one assistant, and a theodolite, and solar transit and smaller instruments. A photographic camera was also carried, for the purpose of securing views to illustrate the character of the region surveyed.

At 3 A. M., September 2d, I reached Moose river clearing, three miles west of the camp of the survey party under Mr. Snell, engaged in retracing and locating the Herkimer county line.

I remained with this party until the completion of the line to the monument on the bounds of the county of Lewis, on September 4th, securing azimuth observations, and testing sections of the line by transit.

On September 5th, I closed up the work of the party and paid off the men, reaching Boonville the next evening.

The results of the work of this party will be found in the detailed report on the location of the boundary line of the county of Herkimer.

On September 7th, I proceeded by team to Gonmer Hill, Lewis county, and gave instructions to the signalmen, in regard to the reconstruction of the signal at this station upon which the determination of the geographical position of the boundary line of the counties of Herkimer and Lewis would depend.

On September 8th I proceeded to the Adirondack Survey signal station of St. Lawrence at the Indian village of St. Regis, to measure angles therefrom to hills at the southward near DeBar mountain, in the county of Franklin, where many sections of State land were located, which were to be connected by triangulation with the stations in the interior southward. September 9th was Sunday.

On Monday morning the twenty-inch Oerthling theodolite was set up, shielded (as was necessary) against temperature, by a light frame observatory, and the clearing away of "haze" or "smoke" in the atmosphere which prevented observation was awaited.

The smokiness of the atmosphere continued several days, so that nothing but the dim outline of the hills could be seen. During this time a meridian line was determined and the true azimuth of referring marks in the vicinity of St. Regis determined in readiness for use when the clear weather should come.

During this time also magnetic observations were taken, which, when compared with the true meridian, gave the mean declination of the needle at N. $10^{\circ} 31'.2$ West, in Latitude $44^{\circ} 59' 45''$ Longitude $74^{\circ} 39' 23''$ west of Greenwich.

The smokiness of the atmosphere was daily more dense and but few sightings could be obtained to the signals. It became probable that no clear weather would be had until after heavy rains had purified and washed the atmosphere.

Although anxious to take the observations personally at this station the large number of parties in the field, and the difficulty of corresponding with them and caring for them while at inaccessible locations in the forest which I had yet to visit, made me loth to use any more time at this station. I, therefore, placed assistant S. J. Farnsworth in charge of the station and instruments, with instructions to watch for clear weather and observe and repeat angular measurements upon signals in accordance with such directions as he should receive from me from time to time. His life-long labors in engineering and surveying in the county of St. Lawrence gave him great familiarity with the local features of the northern section. He was, therefore, specially available for this work.

Mr. Farnsworth arrived on the evening of September 13th, and on the 14th was placed in charge of the station. The smokiness or haze continued, and it was finally decided that, to avoid unnecessary expense, the work at this station should be discontinued until storms had cleared the atmosphere, Mr. Farnsworth remaining within a few miles of the station, ready to occupy it when the clear weather came.

This signal, however, is so near the banks of the river St. Lawrence that the best portion of the day for observation, *i. e.* the hour following sunrise, is not available on account of frequent dense fogs which hang over the low-lands until the heat of the sun is sufficient to dissipate them. When the air becomes heated to this extent, irregular horizontal refraction sets in and accurate measurements are not possible until within an hour or so of sunset. It was evident that patience and perseverance would alone obtain the sightings that were needed from this station.

One feature of our experiences, as giving some idea of the remnants of the Indian race still inhabiting this locality, it seems to me should be given to history. It is to be regretted that the character of this work and the haste with which this report has to be prepared alike prevent any general account of the present condition of this group of the ancient inhabitants.

When this station was first reached, in December, 1882, and the measurements were made by which the triangulation of the Adirondack Survey at length told the distance across the wilderness, from the

waters of the Hudson to the shores of the great river St. Lawrence, the Indians of the reservation were mostly absent—some in the “lumber woods,” and some in their winter habitations further south. Now a great number of them were at their homes upon the reservation, and we were able to form some opinion of them.

This reservation, they claimed, had never been held by others than Indians. They were the Iroquois—the famous six nations whose name had once spread terror from the capes of Florida to the frontiers of Canada, the dominion of their inveterate foes, the Algonquins. It is impossible to restrain interest in this remnant of a tribe once so powerful, and who claim still to be an independent nation in treaty, since the revolution, with the Commonwealth of New York.

This little republic is governed by three chiefs who have “power over land, water, and forest,” the nation being otherwise a commune in which he who clears and improves a farm owns it, and he who leaves and neglects it is liable to forfeit it to the first Indian who may choose to take possession. The tribe numbered at the last State census seven hundred and thirty-seven souls, resident upon an area of twenty-four thousand acres at the mouth of the Raquette and St. Regis rivers. They dress like the whites of their own degree of fortune. They possess valuable farms, and horses and carriages, and, if a knowledge of languages be education, many of them may be said to be far advanced, knowing, in addition to the Indian tongue, both French and English. These remarks apply to those resident on the American side of the boundary line.

The imaginary line which here at the forty-fifth parallel separates English from American territory, seems, on the Canadian side, to carry with it burdens that have kept the Indians of that Province behind their American brothers. Intoxicating drink is still the bane of their existence, but it is proper to say that the Indian chiefs, and the American and Canadian officials are vigilant to prevent the introduction of liquor.

Before leaving St. Regis, I supervised reference measurements with steel tape connecting the signal station with the iron monuments on the United States boundary. The line from the signal station produced northward strikes the shores of the river St. Lawrence to the westward of the old stone church of the Canadian Indians on a true bearing of North $19^{\circ} 05'$ East, to boundary monument No. 772 (distant $708 \frac{41}{100}$ feet), terminating at the steep clay bluff of the river bank, which at the water level is underlaid with large rough clay-stained boulders of the so-called glacial drift.

The old stone church (on the right in the view showing the termination of this line) is of great historical interest. In it was hung the historical bell of St. Regis, the present of a King, and sonorous souvenir of many wars. At the left in the view is seen a dug-out canoe made from a single log, and supplied with the ancient Iroquois sail — a bush. Many of these pirogues are in use by the Indians now upon the St. Lawrence, who cross the great river in them and fish from them. They are uniformly managed by paddles, after the ancient style.

On September 15th, I set out for Mt. Azure, near the foot of the sixteen mile level on the St. Regis river, thirty miles to the southward of the Indian Reservation, taking with me one portable theodolite and the solar transit, mountain barometer, etc. The large geodesic instruments I left in charge of Mr. Farnsworth, for the execution of his work at this station.

It was near midnight on the 15th, when exhausted with fatigue, after a ride of thirty-eight miles over heavy roads, we reached Phelps's at the foot of Mt. Azure.

Next day being clear, I ascended the mountain and reconnoitered the region from the signal station, with a view to extending the triangulation to the large tracts of State lands in the adjacent townships, to the eastward. Thousands of acres of valuable timber, *pine*, as well as spruce and hemlock, are located in the section between Mt. Azure and DeBar Mountain, and from these signal stations it was hoped that bisections could be had with transit upon points on the boundaries of these tracts. The signal station on Mt. Azure commands the entire upper valley of the St. Regis river, eastward as far as township 17 in great tract No. 1 of Macomb's purchase, and innumerable mountain tops adjacent to the boundaries of Townships 15, 18 and 20, which could be made use of as trigonometrical stations. The theodolite was placed upon its tripod and the angular observations commenced. More than thirty of the signal stations of the Adirondack Survey were visible; prominent among them Mt. Marcy, Mt. Whiteface, Mt. Algonquin, Mt. Iroquois, Mt. Emmons, Lyon mountain, DeBar mountain, St. Regis mountain, Bog mountain and Moosehead mountain, as well as the station St. Lawrence, at the mouth of the St. Regis river, which we had so recently occupied.

The solar transit was used upon the completion of the angular measurements with the theodolite, to obtain the azimuths of stations from observations of the sun. As all the township and lot lines in this district were originally located on magnetic needle

courses, the immediate determination of the true meridian was of great importance. The declination of the needle was found to be $9^{\circ}, 32'.9$ west of true north.

The barometric observations, taken on the summit, make the height of Mt. Azure 2,582 feet above the sea. It forms one of the most elevated and prominent of the peaks in this part of the western border of the wilderness. Yet its altitude is small when compared with the high summits nearer Lake Champlain in Essex county, and, being but one of a group of peaks, of nearly equal altitude (all densely forest covered), it owes its commanding value as a station for triangulation, more to its fortunate location than to its height.

The signal on Mt. Azure is a type of the class, built upon the mountain peaks from rough timber, and is strongly and substantially made, the framework being spiked together, the lattice work filling at the top sufficing to distinguish it, even in moderate haze, at distances of twenty to thirty miles. The point observed upon in measuring is the centre-pole; a straight vertical piece arising through the apex and carefully centred over the monument, thirty-five feet below, by transits set at right angles. In clear weather, fit for observations, such a pole is easily seen under high telescopic power at very long distances.

The photograph shows the solar transit elevated upon the high tripod within the signal. This high tripod was constructed by the signalmen from heavy spruce timbers, and was strongly braced. The dimensions of the signal on Mt. Azure may be understood from the height of the transit and of the two guides shown in the view (plate 7). The measurements were not completed at nightfall, although we remained late and descended the mountain in the dark. The negative, from which the plate was made, was taken after sunset and was of the class ordinarily given from one to four seconds exposure. In this case a full minute was given. The height measurements with barometer, made Phelps' Hotel 983 feet below the summit of Mt. Azure, or 1,599 feet above the sea, and barometrically 1,270 feet above North Lawrence on the Ogdensburgh and Lake Champlain railroad.

The degree of elevation of this district, and the moisture of the climate, are — if we may judge from the character of the forest — extremely favorable to the growth of the valuable evergreen trees. With the exception of the vast marshes, which from Mt. Azure are seen to extend over an area of thousands of acres, adjacent to the "sixteen mile level," on the upper St. Regis, the whole region be-

tween Duane in Franklin county, and the hills toward Cranberry lake, in St. Lawrence county, is covered with one vast forest of valuable timber.

September 17th, I reascended Mt. Azure and obtained additional angular measurements. The great obstacle to measurement was found to be the almost unbroken extent of wooded wilderness. Hardly a peak, in this section, could be discovered which was not densely forest covered; Mt. Azure, DeBar Mt., and St. Regis Mt., were the only exceptions in the vicinity. The signal stations which I had placed upon these points, now became doubly valuable, and were the only points with which the land surveys could be connected without greatly increased expense, and the cutting of many sight lines through the timber. This I resolved to avoid, as far as practicable, and, consequently, made the stations on DeBar and Azure the reference and connecting points for all the surveys in this section.

This work accomplished, I set out on foot on the morning of the 18th for the head waters of the St. Regis, for the purpose of personally inspecting the lands and timber, and to ascertain whether the lumbermen, who were now working far to the southward, were extending their cuttings to the State lands in Townships 14, 18 and 20. The baggage and heavy instruments were sent by way of Duane to await me at Chase's on Loon lake near the north branch of the Saranac.

A march of three miles through the forest brought us to the foot of the sixteen mile level; a picturesque stillwater which winds for miles through rich alluvial lands, now among alders and bushy swamps, and now through vast natural meadows; where the thrifty lumbermen had already cut and stacked the wild hay as feed for their teams during the coming winter. It was evident that in a few months the deer and bear; hitherto the sole inhabitants of the forest; would find their most remote fastnesses invaded.

A frightful feature of this lumber enterprise, is the proposed drowning of all these low-lands. A dam has been erected at the foot of the level, which will flow the entire basin, and will convert all the verdure and beauty of this valley to a sickening mass of gray mud and malarial slime. It is to be regretted that the State is not the owner of this beautiful valley. Its drowning and despoilment is the result of a mistaken policy of the State Government in granting subsidies to private corporations for the construction of dams and reservoirs, disguised under the title of an act for the "improvement" of a river, while really causing its despoilment. The water had

been already raised and had been maintained at considerable height, between May and July last; and, although now lowered to its natural limits, the prolonged drowning had already given a sickly and yellow look to the foliage of both trees and bushes. painful to behold. Another season of drowning will complete the devastation.

Ascending the river, by boat, a journey of half a day, we landed where the water became swift and the banks of the stream precipitous, and climbing a gravelly, sandy ridge, marched eastward; over wild, desolate, burnt lands; once covered with valuable pine timber. Aspens and birch brush were replacing the ancient evergreens; but we soon entered a dense dark forest of most majestic white pine, which extended eastward nearly to Folensbee pond.

One of the results of this day's reconnaissance, was the discovery of an elevated place, free from timber, on the west line of Township 18 which would enable me to locate that line directly by triangulation. The site for the signal station was selected; but as the theodolite had been sent to Duane, immediate measurements could not be made.

At evening we reached St. Regis lake, and on the following day examined the lands between the St. Regis and the north branch of the Saranac, in Township 18 of Great Tract No. 1 of Macomb's purchase, and Township 10 in the Old Military Tract.

In township No. 18, north of Rainbow lake, the lumbering interest was found to be extremely active, although half the township belonged to the State. The northerly half of this and the south part of the adjacent township, contain much valuable pine and spruce timber. Of 17,000 acres in the north half of this township 4,000 acres are held by lumbermen in semi-partnership with the State. These men said, very emphatically, that they intended to cut upon such partnership lands and remove the timber, and desired me to notify the Attorney-General and the Comptroller of their proposed action. They claimed that an undivided interest in these timbered lands having fallen to the State by the non-payment of taxes by part owners, the failure of the State to divide the property or to sufficiently care for these lands was ruinous to them, and that they were compelled to cut timber and realize thereon in order to meet their individual assessments.

This was but one of numerous cases in which the State has, by the extraordinary nature of the tax laws, bought itself into copartnership with various lumbering companies. The lands in such cases are among the most valuable in the forest, and it is very apparent that some modification of the tax laws is necessary to avoid such

cases in the future ; and that some legislation should be had at once to meet these extraordinary conditions.

Township 18 is a valuable tract, as it contains many excellent sites for summer residences, and is accessible by good and easy roads, both from the Ogdensburgh and Lake Champlain Rail Road, and from the Au Sable branch of the New York and Canada road. The St. Regis lakes, "Paul Smith's" Rainbow lake, Mountain pond, Osgood pond, etc., etc., are all located in this township ; and the beauty and value of these localities are sufficiently known, to render further comment, on the great value of State lands in the vicinity unnecessary. The examination of these lands was accompanied by a rapid survey reconnaissance ; the topography of the lakes and mountains being sketched, and approximate heights taken by barometer.

The value of all land depends so much upon climate, and climate is so greatly affected by altitude that, I cannot but believe, the measurement of heights to be a matter of the greatest practical importance ; inasmuch as we may, by a comparison of altitudes and the geographical latitude of lands in any country whose general character is known, be able to tell very closely what such lands will produce and what they are worth.

St. Regis lake by my measurements, has a height of 1,623 feet above the sea, and Osgood pond 1,659 feet. Jones pond outlets into and has about the same elevation as Osgood ; but as we go eastward a slight increase of altitude is met with ; the divides reaching about 1,700 feet at Rainbow lake and nearly 1,800 feet at Loon lake. The height of the St. Regis lakes, being based upon exact measurements with level and rod, from tide in the Hudson, is as exact as can be obtained. The means at command on the Adirondack Survey, have not been sufficient to extend the line of levels as far eastward as Loon lake. It is very desirable that the height above tide, of all of the principal lakes, in these chains, should be determined, as they occupy the depressions or "water-gaps" of the mountains, and form the keys to the country.

At Loon lake on Sept. 19th I received telegraphic despatches, which rendered it necessary that I should proceed to Clinton county at once, to arrange for the continuance of the survey of the State lands in that section, and at 8 p. m. on the evening of the 20th, after an exhausting journey under a hot sun, I reached Chateaugay Lake. The survey of Township No. 5, and the location of the prison lands, are hereafter given at sufficient length to explain the work done in this section.

September 21st found me at the camp of assistant Averill's survey party on Indian Point, on the west shore of this lake. A consultation was held in which Mr. Averill laid before me the difficulties he had encountered, and a plan was arranged for the completion of the work. During the afternoon of this day I examined the old marked trees on the boundaries of Township No. 5, and visited the south west corner of the township where the ancient line trees and corner marks on the wood made by the first compass surveyors were found and identified.

This corner is hard to reach being located in a marsh, which owing to high water, would be impassable for measurements until frozen solid.

The manner in which these measurements were finally made, and the corner monumented, will be found in the detailed statement of work in Clinton County.

Almost all the lands seen to the eastward from the west shore of Chazy lake are the property of the State. The signal stations of Lyon Mountain and Birch Hill, which command the greater portion of this district, are shown at the left in the accompanying sketch of Chateaugay Lake, to the southeastward. To the south west, in the same sketch, are the mountain ranges that form the divide between the sources of the Chateaugay river and the north branch of the Saranac. The distant fish-hawk at the right hand in the view hovers in line with the direction of the south west corner of Township No. 5, and nearly below the bird is Indian Point, the location at this time of the camp of the survey party.

Chateaugay Lake is still enclosed by the wild forest, but few clearings having as yet been made upon its banks. It is a beautiful crystalline sheet of water shut in by rocky shores, and, although now very accessible, is still a choice resort for huntsmen and fishermen, who find both trout and deer in sufficient abundance.

At evening on the 21st I returned with assistant Averill by boat across the lake to Ralph's, on the east shore, and settled upon a plan for the extension of his work to the other corners of the township.

The records carried with me showed that there were State lands in Franklin County, near Ragged lake, which were accessible by trail from the camp of the survey party on Indian point. Despatches received from other survey parties rendered it important that I should be in Albany that very night, but, being desirous of learning the condition of the forest on the lands in that portion of Franklin county from personal inspection, (inasmuch as it had been claimed

that the forest thereon had been destroyed by fire and that the lands were worthless;) I resolved to make a rapid march through the woods, inspect them, and return with all possible rapidity, so that with the aid of boat and team I might reach the afternoon train for Albany from Plattsburgh.

Morning, of September 22d found the lake covered with a dense fog, which somewhat delayed our guide in steering his way across the water. At 7:54 A. M., we left Chateaugay lake, the trail ascending gradually through open timber, crossing the transit line of assistant Averill's survey party about three fourths of a mile from the lake. Entering only one small clearing, the trail ascended continuously, though almost imperceptibly, for over four miles, when Mountain pond was reached. This is a small sheet of water outletting to Chateaugay, being 540 feet above Chateaugay lake by aneroid. After a march of two hours from Indian point we reached the end of the long ascent from Chateaugay lake, and beheld before us an abrupt slope down which the trail went steeply. Through the dense forest the shining surface of a large body of water was perceptible. A descent of 400 feet brought us at length to the sandy shores and shallow waters of Ragged lake. Here a clumsy, weather-beaten skiff was found, which was with difficulty launched, but proved leaky and worthless.

The solar transit was set up and observations of the sun taken to determine the meridian and from the magnetic observation the variation of the needle in this locality, was found to be North $14^{\circ} 59'.2$ West. The observations were interrupted by the discovery of an embryo forest fire in the woods near by, the result of some hunter's carelessness. Water carried from the lake in hats and tin cups extinguished it before it had got into the timber.

The shores of Ragged Lake are densely covered by woods, to a large extent consisting of valuable timber. The photograph shows the character of the forest, which is still dense and wild and inhabited by large game, both deer and bear. The State lands near Ragged lake are fine wood lots; and I could not see or learn that they had ever been touched by a lumberman's axe or by fire. The observations having been made we set out upon our return and reached Chateaugay lake in two hours, where leaving the survey party at their camp, I crossed the lake in time to take the steamer to Bellmont and the train for Albany; where I arrived at 2 A. M. next morning.

Between September 25th and October 18th, office work kept me busily engaged at the Capitol. The field-work of several of the sur-

vey parties was now closing, and the accounts and vouchers covering many thousand dollars in small items, had to be examined, settled and audited. The men were paid off as rapidly as the chiefs of the several parties completed their accounts.

The middle of October found six survey parties still in the field: one in Clinton county, two in Essex county, two in Hamilton county and one in Franklin county.

In Clinton county assistant Averill was continuing the measurements along the bounds of township 5, and the adjacent tracts. In Essex county, assistant Blake was connecting and tying together by triangulation, the surveys of the blocks of State lands in the central and northern portion of that county, and Mr. G. L. Locke with another party was tracing the boundaries of lots in the Old Military tract, immediately adjacent to the north line of Totten and Crossfield's purchase. In the southern portion of Hamilton county, assistant Francisco was tracing out and settling the bounds of State lands in Palmer's purchase, near which lumbering operations were in active operation. In the central portions of Hamilton county assistant Koetteritz had charge of a special section of triangulation, designed to connect the work in the south-western division with the Adirondack Survey triangle sides so as to unite the detached surveys. In Franklin county and St. Lawrence, other surveys were also in progress.

The direction of these survey parties and the paying off of the men and settlement of the accounts kept me constantly engaged, and with the limited means at command required the strictest attention to secure the needed results within the limits of the appropriation. Frequently large amounts were required to meet the running expenses of the parties, and, as these occasions admitted of no delay, the work could only be maintained by recourse to my private funds. The number of parties in the field and the vast area covered — through ten of the largest counties of the State — with the innumerable difficulties incident to operating in a wilderness region, off from trails, made the aggregate cost of the work cover the entire appropriation, leaving no portion for the salary of the Superintendent, who—inasmuch as the appropriations for the Adirondack Survey had been still more limited — had the honor to conduct both these Surveys during the present season without any compensation whatever.

The superintendent had hoped that with the close of October all the field work would be completed, but the middle of that month

had passed and a vast amount of both office and field work remained to be done.

It now became necessary, even at the hazard of some temporary inconvenience and discomfort to the detached survey parties, that the superintendent should again take the field to close up the triangulation in the North Eastern Division. Here in consequence of the severity of the weather assistant Averill was unwilling to risk his health at this season of the year by any prolonged exposure in tents upon the frosty mountain summits. No other officer of the survey was available for this work, all being busily engaged. Consequently, having arranged the office work as far as practicable, I proceeded to Plattsburgh, Clinton county, on the morning of October 19th—leaving one clerk in charge of the office; every other attache of the survey being in the field.

October 20th was passed in Plattsburgh closing up the first section of work in Clinton county and paying off the men. After much discussion I called upon assistant Averill for estimates of the cost of completing the monumenting and mapping of the survey of Township No. 5, with a view to making it a matter of contract. On Monday morning, October 22d, Mr. Averill submitted estimates in writing, which, after examination and some alterations, were made the specifications for the completion of the work in his division.

At 6.40 A. M. on the 22d inst., I proceeded by way of the Plattsburgh and Dannemora railroad to Rogersfield, Clinton county; on my way to my old signal station on the summit of Lyon Mountain, which, as we neared Chazy Lake could be seen from the train grizly with ice and snow upon the branches of the dwarf spruce trees on the summit. At Rogersfield, the famous Chateaugay Iron Mines are located, a broad band of solid, magnetic iron stretching for miles across the rugged gneissoid foot hills of Lyon Mountain. These beds or veins are of unknown depth and the purity of the ore makes them more valuable than mines of gold or silver. It was amazing to see the town which had grown up around the mines since 1878. As far as the eye could reach the valley was filled with log houses, railways above and below—hoisting machinery—engine houses and all the features of a large mining town were to be seen.

October 23d I succeeded in organizing a force of packmen and secured one pack horse to aid in transporting the instruments and baggage to the mountain top. Axemen had to be employed to clear logs from the trails now disused, but by nightfall I had pitched my tent upon the summit of the mountain, and made my arrangements

so that letters and telegrams reached me from Rogersfield with promptness and the general management of the survey be continued

Under the head of Triangulation I have elsewhere given a detailed statement of the results of the work at this station. Snow and storm, sleet and fierce winter gales beat upon my tent and it was the 6th of November before the absolutely necessary angles connecting the detached Survey of the adjacent boundaries had been secured.

Deserted by my men, who refused longer to endure the cold and exposure, I had remained in camp alone upon the summit, and only descended to Rogersfield on the 6th when the requisite measurements had been secured.

November 7th I proceeded to Plattsburgh, leaving Mr. Averill to complete the measurements across the head of Chateaugay Lake as soon as the ice became firm and on the 8th inst. reached Albany again, and resumed duty at the Capitol.

There was much requiring my attention. Two of the parties had not received my despatches notifying them of the location of my field head-quarters. Money, provisions, instruments and men were needed at various stations. By hard work, and many telegrams and letters, the anxiety of the assistants in charge of these parties was relieved and business brought back to its normal condition.

By November 21st all the Survey parties but one had closed their work for the season.

Assistant Farnsworth hindered by the fogs arising from the river St. Lawrence was unable to obtain all the angles desired at his station, but through the most severe experiences remained resolutely at the signal in a tent banked with snow and sheeted with ice until longer waiting was evidently fruitless and closed the field-work on the 19th of November.

This brief narrative is merely designed as an introduction to the detailed statement of the results of the field-work. It is not necessary to mention all the details of instructions given both orally and in writing to the assistant surveyors. The accompanying records will show what they were sent out to do, and the manner in which the work was performed.

GENERAL OBSERVATIONS.

Before entering upon the systematic discussion of the measurements, and the results of the work, a general statement of the char-

acter, location and value of the Public Lands, within the limits of this survey, will be proper.

In the first place, as the result of the inspection and Survey of the State Lands, as hereafter given in detail, it may be stated that they are equal, or superior in value, to the lands held by private parties, adjacent to the tracts held by the State.

The value of 500,000 acres of these public lands may be placed at an average of \$2 per acre or not less than \$1,000,000.

Applications have been made by lumbermen for the purchase from the State of large tracts at a price as high as \$4 per acre. Large areas of these lands could now be sold at such a price.

The death of the spruce trees over a large extent of country has attracted attention to the rugged slopes of the mountains, dark with the dense growth of thrifty healthy evergreens. These trees reach, in this latitude, their best development between 1,500 and 2,000 feet above the sea. The sides of distant blue ranges of mountains, hitherto considered practically inaccessible, are now found to be the only source of supply, and by "slide-ways," or "dry-sluices," timber can be sent down to the valleys, from these mountain slopes, from a height of nearly half a mile, vertically above the sea. The construction of narrow gauge railroads into the forest has been commenced and, timbered lands along the routes of such roads are held at an increased valuation. Thus lands heretofore deemed inaccessible, are suddenly made of great commercial importance; and the property that cannot be disposed of to-day, may be eagerly sought to-morrow.

Aside from the ordinary commercial aspect these lands have, in many places, an intrinsic value from the beauty of their location, and the picturesqueness of their lake and mountain scenery for which the Adirondack region has become famous. It may be asserted, without danger of contradiction, that every accessible lake, and every bay, point thereon, or headland or reach of picturesque river, where fish and game abound, has its cash value as a site for some woodland villa, cottage or "camp." There are thousands of such sites, surpassingly beautiful, now in the possession of the State; they are eagerly sought and would be quickly purchased, could they, under the existing laws, be offered for sale.

The sentiment of the people of this State, is evidently against the further sale of these State lands. The destruction of the forests; the disenchantment of the lake shores by settlements; the defilement of the pure waters by sewage; the reduction of this wonderful region to an arid waste by fires, has been generally and wisely opposed, throughout the State, by all classes of citizens.

Yet, few have any idea, of the actual value of the State's possessions, or the exact location of the State lands.

The beauty of Raquette Lake has been sung by poets; and the charm of its clustering islands, bright gleaming bays, and jutting points are now famous throughout the land yet, few know that out of the thousands of acres of dense forest, which reach from its shores to the encircling mountains, only here and there a point, (now built upon,) has private owners, and that all the rest is public domain. So also northward along the banks of Long Lake or Incapacho; passing from the Raquette river into Franklin county we find nearly all of the beautiful Saranac Lakes in the possession of the State, and that wild and densely forested area, covering the Fish Creek waters on the Upper Saranac,—choice ground for hunter, fisherman or naturalist—is entirely upon the public domain.

Leaving these great tracts, further northward stretches that wonderfully picturesque country, between the St. Regis Lakes at Paul Smith's, and Meacham Lake, De Bar Mountain, Deer River and Duane, covered with thousands upon thousands of acres, to which the State has now perfected title.

This section of State land is almost entirely forest and reaches northward to the very borders of the wilderness. Eastward of it, the State lands (thousands of acres,) extend in scattered blocks and lots to Rainbow Lake, Round Lake, Loon Lake, Plumador Pond, Wolf Lake, Ragged Lake and into Clinton County at Chazy Lake, where, one block of ten thousand acres, forms the most valuable possession of the State in that district.

Scattered portions of State lands are found northward, almost to the Canadian boundary, and eastward nearly to Lake Champlain.

In Essex County, the State lands are situated, in the most interesting portions of that mountainous section. The dense forest, which covers the range of mountains between Lake Placid and the Saranac river, including Moose Lake and McKenzie Pond, Saddle Mountain and Sugarloaf Mt., stretches northward of Mt. St. Armand to the borders of Clinton County. Southward from Lake Placid this tract of State land reaches (with scattering lots of private land included) ten miles away to the source of Chub river, and Moose Pond, where the waters descend to Cold river and the Raquette; covering nearly the whole of the high mountain range, west of the trail from North Elba to the Indian Pass. This is all dense forest, and is the region famed as the location of the rich vein of silver discovered and lost by the old woodsman Scott, forty years since.

Eastward and southward from Lake Placid, tracts of State land upon the mountains in Keene were discovered heavily timbered. Valuable spruce and cedar timber was found upon the tracts surveyed and monumented this season lying between Mount Marcy and Sable Mountain, and near the Edmund's Ponds or Cascade lakes.

Eastward of Keene Valley a large portion of the Giant Mountain range is enclosed within the limits of the State lands, and separate tracts extend as far eastward as lot 113 in Chesterfield, near Peru bay on Lake Champlain.

Returning to the County of Hamilton, southward from Raquette Lake, the State possesses thousands of acres of heavily timbered land in Township No 6, adjacent to Shed Lake and Lake Fonda. Further southward, in townships 3, 8, and 32 enormous tracts of the most valuable spruce timber are owned by the State; in township No 3 almost enclosing the beautiful Cedar Lakes, and covering nearly all the valuable timber near Lewey Lake and along the Blue ridge. In township No 38, the forest, upon the lowlands along the Indian river below Lewey Lake, forms the drowned lands, or basin of the Indian Lake reservoir. Here all the trees have been destroyed by the artificial raising of the water, for the purposes of the reservoir; and a broad waste of fluid, ink-like mud and dead and decaying timber—now, at low water, replaces the once unbroken forest. This tract of State land, extends two miles northward of Indian Lake, to the south line of Township No 33 and includes valuable property.

Examining the character of the State lands still further to the southward, at Tacolago Lake, Echo Lake, great Round Lake, and Lake Pleasant (the county seat of Hamilton county) State lands were found in every direction, and generally densely covered with forest. Both branches of the Sacondaga river are hemmed in by the public lands; valuable tracts of timber existing in Townships No. 1 and 10, and Palmer's purchase; while in Bergain's purchase, a large tract of State forest exist. Here it is claimed that trespass has been committed upon one lot, to the extent, of \$30,000, by men ostensibly cutting timber on adjacent property. This matter is now in the hands of the Attorney General, and an action has been commenced against the trespassers, and will soon be brought to trial.

Westward of the Sacondaga river, is the Benson Township, the district, now famous for its "gold mines," a rolling, mountainous forest region. The State lands are of great extent, reaching, in irregular tracts, from Wellstown to Arietta, with occasional strips of

intervening private lands. In the Oxbow tract the State has less land than in the adjoining patents; but in the Lawrence Tract and in the wild forests of Artherborough, are large areas of public lands, covered with superb timber which deserve immediate attention to preserve it from the same system of plundering, which has despoiled valuable lots in the neighboring County of Herkimer.

But it is unnecessary to refer to every tract of State land. Valuable tracts, are owned by the State, in hundreds of localities as interesting as the more famous places mentioned.

The general elevation of these lands is between 1,200 and 2,300 feet above the sea; the mean altitude of the valuable forest lands being about 1,700 feet. There is no true soil upon the mountain sides; nothing but gneissiod rock, covered with boulders, overlaid with (humus, woody-peat or "spruce duff,") the decayed remnants of the forest, that have accumulated during ages.

To give those, who are unacquainted with the region, an idea of its character, I extract the following description from my report to the Legislature in 1879, on the progress of the Adirondack Survey: (Seventh Report p. 65)

"The vast Adirondack region contains the only great State forests now remaining as a public domain within New York.

At the close of the American revolution, the Crown lands of Great Britain, confiscated by the provisional government, became the property of the State.

The Indian frontier warfare had made this region a dark and bloody ground. From its shades burst those savage incursions which filled the valleys of the Mohawk and the upper Hudson with death and desolation.

When peace returned to an exhausted land, the fair, rich plains of the west began to open before the settler, and the wilds, which descended to the valley of the Mohawk and guarded the future pathway westward to the Indies, were for the time forgotten.

The new government of New York was impoverished, and endeavored to relieve itself by the sale of these wild, northern lands. Too poor at that time to make proper and perfect measurements, it sold vast tracts by the old Colonial Surveys, made in the rudest manner with magnetic compass, just prior to the revolution; surveys — which have now served for more than a century as the boundaries.

between estates and limits of counties — marked only on crumbling trees.

In 1772, in the Colony of New York, the first surveys were made of Totten and Crossfield's purchase in the heart of this strange region, whose pure waters and vast forests have been fortunately preserved to play so great a part in the future prosperity and happiness of the State.

More than a century has passed away and the wild forest still covers these most ancient mountains. Carved by the glaciers or the icebergs of the drift period from the most ancient granite of the world's formation; washed and eroded by the storms of a thousand centuries, the Adirondack ranges rise in dark and gloomy billows, stretching from the hills which skirt the Mohawk away northward to the shores of the river, from which this most ancient rock takes the term Laurentian.

Elsewhere are mountains more stupendous, more icy and more drear, but none look down upon a grander landscape in rich autumn time; more brightly gemmed or jeweled with innumerable lakes, or crystal pools, or wild with savage chasms, or dread passes; none show a denser or more vast appearance of primeval forest stretching over range on range to the far horizon, where the sea of mountains fades away into a dim, vaporous uncertainty.

A region of mystery, over which none can gaze without a strange thrill of interest and of wonder at what may be hidden in that vast area of forest, covering all things with its deep repose. It is not the deer of which we think, treading the deep rich moss among the stately tamaracks; nor the bear, luxuriating in the berry patches on the mountain side; nor the panther nor the wolf in their lonely and desolate wilds, seeking their feast of blood: we gaze downward from the mountain height on thousands upon thousands of square miles of wilderness, which was always one — since forest it became — and which hides to-day, as it has hidden for so many ages, the secrets of form, and soil, and rock, and history. It is upon this that we ponder. Huge are these almost undecipherable pages of the world's annals; enormous and difficult to read; yet there are marks and traces here and there which tell in a brief, irregular and fragmentary way — to those able to decipher such inscriptions — the prehistoric growth of continents; the origin of rivers; the spread of vegetable and animal life and the approach of man."

DETAILS OF MEASUREMENTS.

(SECTION I.)

JERSEYFIELD PATENT.

(Grant to Henry Glen and others 1768-69.)

NORTH BOUNDARY

FULTON, HAMILTON AND HERKIMER COUNTIES.

The different sections of State and private lands, in those portions of the Counties of Fulton, Hamilton and Herkimer, which are located on or near the North line of the Jerseyfield patent, were originally surveyed at a very early period, and their boundaries have always been involved in doubt owing to some defect or uncertainty in the old surveys.

Private parties, the owners of lands adjacent to those of the State, at various times attempted the settlement of these disputed boundaries, and incurred large expenditures in their attempts to find which were their own, and which the State lands.

The existence of a heavy penalty for the cutting of any timber upon State lands; twenty-five dollars for each tree cut or destroyed; made a knowledge of the location of the real boundaries a matter of importance, to all careful and conscientious men. Regular lumbermen, also, carrying on a large business, found it inconvenient and dangerous to deal in lands whose boundaries were so uncertain, and where profitable cutting of timber upon what they deemed their own lands, might be followed by costly litigation with the State authorities; and still more costly, or even ruinous, interruption of business.

Here, as elsewhere, the uncertainty of the boundaries interfered

with accurate assessments and the collection of taxes; and the uncertainty of ownership was the opportunity of timber thieves.

An organized system of timber depredation was the result of this condition of affairs; and notwithstanding all the efforts of the Comptroller and the District Attorney of Herkimer County, the plunderers of the public lands escaped punishment to a great extent for lack of proof that the timber stolen was really taken from the State lands.

I had been desired by the Comptroller to give this matter my attention, as of the first importance. At the same time, I received from the Hon. A. B. Steele, District Attorney of Herkimer county, a detailed statement of the difficulties which he had experienced in endeavoring to prosecute parties cutting timber on, and removing the same from State lands.

After mentioning various cases in which he met with great difficulty in securing the punishment of trespassers owing to uncertainty as to the real boundaries, the District Attorney says:

“It was found that all lines had been obliterated by felling and
“removing all blazed trees and other marks.” He states that nothing
can be done in many districts without special surveys. Even where
lot lines could be found, trespassers obtained immunity by the in-
timidation of witnesses. Detectives were employed to watch in
some localities, and witnesses were finally brought before the Grand
Jury. He adds: “Some very peculiar circumstances were revealed;
“such, for instance, as that the person testifying could not tell his
“nearest neighbor three rods away while he was cutting on State
“lands; could not tell his team; could not tell where a certain lot
“was, although he knew every other lot in the town, and many other
“things equally as absurd. This much was revealed. When a man
“desires to get timber from State lands he will send some one ahead
“to cut every blazed tree on the lines, then cut them up and remove
“them to some distance, and so remove all evidence of lines. After
“this is done they will send men to cut logs on some piece near
“State lands, telling them to cut only to the blazed trees — but
“there are none, as they have all been removed. In this manner
“the entire State lands will be cut over. If a person informs upon
“a trespasser neither his property nor his life is safe, so that persons
“are very loth to tell what they know, and even upon secret inves-
“tigations before a Grand Jury every conceivable evasion is re-
“sorted to.”

Such a statement from the public prosecutor of the County, showed

how great was the need of the settlement of the disputed boundaries, which formed the root of the difficulty.

Private owners were suffering equally with the State from the depredations of these lawless men, and were without redress; nor was any power lodged in their hands or in the hands of any county or State officer to settle, officially, the difficulty, save through substantial surveys; not *ex parte* in their nature, but impartially made by the superintendent of this survey in the line of his duty in compliance with the law.

The views of the Comptroller and of the District Attorney as to the urgency of the settlement of the disputed boundaries of the ancient land patents, in this section, were reinforced by the statements of the principal land owners and local surveyors.

In a conference held at the office of the superintendent in the Capitol, maps and plans were submitted showing the surveys which had been made at private expense, in the hope of settling the difficulties; and an amazing condition of affairs was revealed.

The local surveyors, in endeavoring to trace out the ancient lines, had found, not an absence of boundary lines, but an overabundance of them. Double systems of allotment within the patents were claimed to have been found.

The principal difficulty at first appeared to depend upon what was the true allotment of the east part of the Lawrence patent. This patent contains, exclusive of the Caldwell and Sickels tracts, 35,560 acres. It was surveyed for one Jonathan Lawrence in 1791 or 1792 and was based upon, or built up upon, the north line of the Jerseyfield patent.

This original survey of the boundaries of the Lawrence patent, appears to have been made by Isaac Vrooman, the same surveyor who laid out the Jerseyfield patent.

The Jerseyfield patent, originally granted to Henry Glen and others, was in its turn based upon the north boundary of the famous Royal Grant to Sir William Johnson, of which Governor Tryon, in a report made to the Earl of Dartmouth, "in obedience to the commands of the King" June 1774, says: "Two instances only occur of Grants or Letters Patent for Lands under the Great Seal of Great Britain — one to Sir Joseph Eyles * * and the other to Sir William Johnston Baronet."

It is of historical interest that this Royal Grant was the gift, not of one but of two Kings; for the aboriginal title was from the great

chief of the Six Nations, King Hendrick, and possibly the last grant of land made to the whites by that celebrated chieftain.*

The bearing of the north bounds of the Royal Grant was made the governing course, not only for the northerly line of the Jerseyfield patent, but for the intervening ranges of lots in Jerseyfield, and has been generally supposed to govern the lot lines in the Lawrence tract also.

The county line between Hamilton and Fulton counties depends for many miles upon this base for its direction; and the positions of all the several tracts, as far northward as the Moose River tract, in the county of Hamilton, are more or less dependent upon this ancient grant.

Before entering upon the discussion of the data, on which the survey work in this section was based, a brief account of the country is needed to render the work done intelligible.

The northwestern portion of the County of Fulton, twenty miles back from the Mohawk river, becomes quite elevated. The depressions are not great nor are the mountains very much higher than the valleys; but the whole section reaches the altitude of the average Adirondack interior. Valleys, are here found two thousand feet above the sea, while the mountain tops — or hills — are but two or three hundred feet higher. A dense forest; largely consisting of valuable evergreen timber; covers the mountains down to the very margin of beautiful lakes and trout streams; and wild game, deer and bear, are found even near the margins of the forest. To the eastward, in Hamilton County, in the neighboring township of Benson, is situated the gold mining district heretofore referred to.

It is its wealth of valuable timber, however, which makes the northern portion of the Jerseyfield patent so important, and has attracted toward it, and the adjacent Lawrence tract, so much attention. New rail-roads have been projected into this section, and proposals were being urgently pressed by capitalists, for the sale by the State of its timbered land in this section, when the passage of the law of 1883, forbidding the further sale of State lands by the Commissioners of the land office, stopped speculation; and the importance of husbanding the forests that protect the sources of the rivers from the influence of evaporation, engaged public consideration.

* King Hendrick greatly admired a gold laced coat belonging to the Baronet, and told Sir William that he dreamed that he gave it to him. The Baronet presented the Chief with the coat, but, in his turn, "dreamed" that this vast territory was granted him. The Chief gave him the land, and they dreamed no more.

Through the heart of this section, ran the boundary line between the counties of Fulton and Hamilton; which, further westward, became the boundary between Herkimer and Hamilton counties; and this line was the north line of the Jerseyfield patent, and, throughout its extent, was involved in the gravest doubt and uncertainty.

Upon this line as a base depended the lines of the State lots; not only of those lots immediately upon it, but of those which depended on distances chained, years since, north or south from this base line.

Records were found, which proved that the line had originally been run with the magnetic compass and common chain. The line had never been monumented; the Colonial Surveyors merely marking the trees sighted to by the compass in the dense wild forest.

I was convinced after an examination of the ancient records and of witnesses from the locality — compass surveyors and those having a knowledge of the land lines — that it would be necessary to rerun this line with precision; measuring a traverse along it with transit and steel-tape, connected and located by triangulation.

Two nearly parallel marked lines were said to exist at the north easterly end of the Jerseyfield patent, each old and the marks in grown and covered by the bark of the trees.

Early in the investigation, Mr. Lorin Kelley, Surveyor, reported to me that he had inspected a line, crossing the large lake in the north part of the patent, known as Jerseyfield lake, and that he had retraced the line, both east and west, and found it to cross certain lakes and streams, in a manner resembling the description in the ancient records, of the portion of the north line of the patent supposed to extend through this section. He also reported finding some distance to the eastward of Jerseyfield lake, another line about a quarter of a mile north from the first line.

Further research proved, that this northernmost line was accepted by some local surveyors as the true north line of Jerseyfield.

There was also an impression, that possibly, neither of these lines was the true Jerseyfield line, and it was this feature of the case; the general uncertainty of the location of the north line of Jerseyfield; which induced the Comptroller to urge that I should give to its location special attention.

After carefully considering all the evidence that could be obtained relative to this line, I found myself possessed of the following information:

- (1.) That the West line of the Jerseyfield patent could not be

questioned, being the West Canada creek, called by the Indians in 1768 the Teioga river.

(2.) That Isaac Vrooman on July 16th 1768 commenced the survey of Jerseyfield at the north-east corner of the Royal Grant, and traced the line westward to the said West Canada creek, to a point which I identified as being a short distance below the present village of Grant in Herkimer County.

(3.) That the distance recorded by him on this line was 23 miles 7 chains and 33 links (1847.33 chains or $121,923\frac{78}{100}$ feet) and the magnetic bearing of the line South 58° East.

(4.) That a traverse up the East bank of the West Canada creek was made by Vrooman and shown upon his map of the patent; which gives the points where brooks were crossed or islands met with in the river etc. and that at the "head of a large island," he commenced to run the north line of Jerseyfield on a magnetic bearing of S. 58° E., intending it to be parallel with the north line of the Royal Grant, and of a length equal to the south line of the Jerseyfield patent.

Vrooman was accompanied by six Indians representatives or commissioners on behalf of their tribe, "the Canajoharry Castle;" and he states in his journal: (July 23d, 1768) "We camt friday night at the mouth of a Beaver dam. Saturday morning the Indians told me I was opposite of the northern most of the three small lakes. "I went to the lake with three Indians and three white men and "ran from the Northern end of said lake N. 58° W. 6 miles and one "chain to the Canada or Tioga Brook, and struck the same just above "the upper end of the large island.

"Sunday.

"Monday we went the same line back again from the upper end "of the island S. 58° E.," &c. &c.

"At 6 miles 1 chain to the first small lake where we camped "Monday night." * * * *

"At 8 miles 32 chains to the second lake." * * *

"At 9 miles 58 chains to the third lake." * * *

"At 19 miles 30 chains to a small lake." * * *

"At 22 miles 51 chains to the top of a steep rocky hill."

"At 23 miles 7 chains & 33 links, down the hill to about the "middle of another small lake of about 20 chains over. I made the "corner by running at right angles where there is another small lake "near adjoining on the north of about the same bigness."

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Here we perceive the value of topographical notes; for his mention of the distances at which he reached these lakes, gives a chain of unmistakable natural land marks; lakes, whose rock bound shores form unalterable monuments.

It was now possible to form a plan for the identification and restoration of this ancient boundary line, in such manner that the re-survey would carry with it the logical evidence of its correctness.

Believing that the "island" in the West Canada creek mentioned by Vrooman could be identified and made the initial point of the new survey, I determined to make search for it, presuming that the original marked trees would be found in the forest on the river bank.

As the retracing of so ancient a line would call for great experience in woods-craft; for such ancient marks are frequently entirely invisible to untrained eyes; and wishing also to have whatever line was established fortified by every precaution and the testimony of all the old experts in forest surveying, I selected two men, whose life long experience in forest surveying made them authorities upon such lines, sending with them a competent corps of chainmen, flagmen and axemen to execute the work. These men were Mr. S. H. Snell and Griffith Jones. The former has been engaged on surveys, in Totten and Crossfield and Macomb's purchase, since 1830, having been in survey work in every portion of the wilderness and also on the original surveys of the Sackets Harbor Railroad and other engineering works in the wilderness. Mr. Jones had personal knowledge of some of the lines of the interior allotment of the Jerseyfield patent, and was acquainted with the amount of allowance that should be made for the *change in the variation* of the needle in retracing lines of that period, from his own experience on the lines of the Royal Grant, and the De Witt and Matchin Tracts; which are adjacent to Jerseyfield on the west. His knowledge of old marked lines and of where side lines come in, forming lot corners on the main line, I believed would be of service.

With these gentlemen I associated Mr. J. B. Koetteritz, a civil engineer and surveyor of skill and experience, who, under appointment from the Comptroller, held the position of State land agent for the county of Herkimer. (While serving upon the State Land Survey, Mr. Koetteritz drew salary only from this department.)

To Mr. Koetteritz was assigned the duty of inspecting and verifying the work of the two experts; and he was also charged with the reconnaissance for points on hills near the line, suitable for trigono-

metrical stations by which the line could be connected with the triangulation of the interior of the Adirondack region, executed during former years. He carried with him copies of the field notes of the ancient surveys, and had with him a hand level and a superior aneroid barometer for use in sketching the topography.

The measurements were entrusted to Mr. S. S. Snell with Mr. A. M. Moss crop as his assistant, who, with three sturdy woodsmen to act as axemen and packmen in the forest, completed this party.

The portion of work on the north line of Jerseyfield now proposed to be done was in the first instance explorative. It was the duty of this party to make search and rediscover the line at its western end, where it was not so much in dispute.

As soon as the line was identified beyond all question, I directed Mr. Koetteritz to organize a transit party and make a rigidly exact traverse of it; connecting it by offset transit lines with signals to be built on the nearest summits.

On June 27th the survey party rendezvoused upon the banks of the West Canada creek in the county of Herkimer near the south line of the town of Wilmurt, where the experts, after consultation, believed the line should be found.

The party included the superintendent of the survey, the two experts, the State land agent, the two chainmen and three axemen.

The banks of the West Canada creek, generally abrupt at this point, are upon the opposite eastern shore in the direction in which the survey was to be made, covered with dense forest. Here we discovered, to our alarm, the lumbermen had made great havoc. To our dismay, also, more than one island was discovered. Indeed for several miles, islands, both large and small, were found; the stream, dark and picturesque, flowing over a bed of water-worn boulders, around and among the devious channels, rendering exploration difficult.

At length a line of old marked trees was discovered upon the opposite side of the river; and, fording a rapid below the line, we proceeded to examine it. By one of the oldest inhabitants we were informed that this was the south line of Vrooman's patent: this, if true, would have made it the north line of Jerseyfield, of which we were in search.

The difficulty that now arose was that there was here no "island" at all, notwithstanding the statement of the ancient field notes that the point of departure of the line was from the "upper end of the large island."

An unbroken forest extended along a low shore of polished drift rock and bushes (alders, red willows and elder) skirting the stream; huge elms, water maples and yellow birches forming the interior forest. Entering the woods, the forest-flat was found to be wet, and evidently subject to overflow by freshets. At a distance of six chains back from the shore the bluff was encountered, and I had no difficulty in tracing the line by the ancient blazes upon the trees, although on the trunks of the gigantic, moss-grown "hard-woods" in the swamp, little more than a large oval spot, looking like mildew was discernible. The eyes of the aged experts did not require spectacles to identify these "mildews" as very old marks. One called attention to the vertical seam or suture separating the oval into two parts. The other detected upon the bark two smoothed surfaces which he identified as axe-marks more than a century ago. The difference was perceptible to the touch; the bark where it had been shaved by the axe remaining smoother than elsewhere on the body of the tree.

While all agreed that this was a very ancient survey line, more than a century old, the discrepancy in regard to the island disturbed us; no island being located at this point, except three low bush-covered gravel banks some distance down stream.

The supposition was made that in the lapse of a century, floods had eroded and destroyed the island that once existed here. This supposition I held ill-founded. The growth of timber on the banks of the stream was of an age which, when the condition of the river bed was studied, led me to believe that the small islands below had not extended up into the narrow channel opposite the line.

The wading of the river made the examination of the banks and islands uncomfortable work in a stream fed from mountain springs, from which the ice and snow had not yet all disappeared, and Mr. S. S. Snell, who was not only a good topographer and chainman but a professional ship carpenter, soon constructed, with the aid of the axemen, a light bateau in which he ferried the searchers across the water and greatly facilitated the work.

Search was instituted at the head of every island up and down stream for a considerable distance, and a new traverse of the stream made to compare with the ancient work, to find the corresponding angles and bends of the river that might be identified with the old survey notes.

Thus proceeding and directing the men, I followed the banks of the stream downwards from the old line into dense underbrush and came at length to a promontory projecting down stream, having a

deep arm of the creek on either side. The point on which I now found myself was so much like an island that even the axemen, whose interest had become excited, exclaimed that possibly this promontory was the island sought.

Ascending the promontory nearly to the line again we managed to cross the inner arm of the stream, and found that a long, deep bayou extended between the bluff and promontory nearly up to the old line that we had found.

The ancient field notes were now brought forth and re-examined. The length of the island was found duly entered therein, together with the magnetic bearings of the lines as chained in 1768 :

“ S. 13° E. 11^{ch} 50^{l} the lower end of an island.

“ S. 67° $30'$ E. 42^{ch} under the bank and in the water.

“ N. 88° E. 13^{ch} to the upper end of an island.”

An allowance of four degrees being made for the change in the variation, the old stations were approximated and the retracing attempted. The bearings followed the shore, and led so remarkably under the steep bank and into the water that the men, much amused as well as very wet, agreed that there was no mistake about this portion of the line.

The problem was : how came the island converted into a promontory ? Near the upper end of the bayou at the neck of the promontory was a deep bay into which two small streams ran. One of these small streams came down close under the bluff into this deep hole ; the other, apparently formed by filtration from the creek, which ran at a higher level opposite the neck of the promontory, came in from the northwestward, *i. e.*, from the direction of the creek, along an irregular *sunken* channel of oozy moss-covered rocks, partly grown up to bushes and was overhung and shut in by the forest.

Here, I imagined that I saw the solution of the difficulty. This side channel had, a century since, been open and traversed by a branch of the creek. Subsequent floods had closed the mouth of the channel and it had grown up to brush. While this was plausible, it was annoying to find that the last compass course of the ancient traverse of the stream did not plat in accordance with the real location of this side channel.

The whole of June 28th was occupied by the search and owing to rain, those of the party who searched the forest for lines of marked trees, were as wet as those who waded the stream and searched the shores. By night every man was soaked with water, and cold and

chilled; yet, notwithstanding every exertion, only the one old line could be found, though the forest, at the head of the islands above and below, was carefully searched.

To test the age of this line I directed the axemen to cut into the trees and take out blocks deep enough to reach the original marks. A number of trees, spruce, yellow birch and beech, were examined in this manner and gave the best proof yet obtained that this was the original line. The annual rings of growth were very distinct and could on each block, be counted back to the year 1768. So deep, however, had these marks been overgrown by the wood that often, after chopping five or six inches into the hard-wood trees, there would be no trace of even an outward leading suture or seam, and only when within one or two inches of the mark would any trace of the process of ingrowing be discernible.

The magnetic bearing of this line was between two and three degrees less than that recorded by Vrooman in his original survey, but this was only a proof of the accuracy of the line, as the direction of the change was in that of the known movement of the needle. It was remarkable that the change in the declination had been so small. What the absolute declination was, I was not able to determine on account of the continuance of the storm, which hid the stars at night and, during the day, gave us but one or two dim uncertain glimpses of the diffused sunlight between bursts of rain.

The morning of June 29th showing a continuance of the storm, and time pressing; (other surveys in other counties calling for my attention,) I ordered the line found to be retraced scrupulously to whatever point it should come, directing it to be measured with a light steel chain divided into links—in accordance with the ancient system—so as to follow, as nearly as might be, the course of the old line; the greatest care, however, being taken to secure exact horizontal measurements. The initial point of the re-measurement was a massive granite boulder, which was drawn from the river bed by powerful horses chained to it; the horses having forded the river on the rapids below the line, and the stone being drawn along the river bank to the station. Another large stone intended as a reference monument, was drawn to and set on the opposite bank of the creek (here only one hundred and six feet wide,) and from this reference monument a line was run N. $27^{\circ} 30'$, E. 6 chains and 27 links ($413\frac{82}{100}$ feet), to a drill hole in a massive block of granite weighing between ten and twenty tons which was made the second reference monument.

This great rock is consequently to the north of the south line of the town of Wilmurt in Herkimer county, at the distance given, and stands back from the shore of the creek in the bank.

These reference marks are thus particularly described to facilitate the future finding of the initial point of this line. Commencing at the monument set on the west shore of the creek, the line was brushed out by the axemen to the top of the bluff, one-eighth of a mile distant, and rising 80 feet above the creek. Having set up the solar transit above the monument I waited long and anxiously and in vain for a glimpse of the sun in order to obtain the true bearing of the line and de-*clination* of the needle. The magnetic bearing here observed was S. $54^{\circ} 35'$ E., a decrease of $3^{\circ} 25'$ since 1768.

Having got the party started and sufficiently supplied with provisions, I gave the assistant in charge instructions to look carefully for the lakes mentioned by the original surveyors, and to send out a messenger to the nearest postoffice with reports of their progress, every few days, as I hoped to be able to rejoin them in a short time and inspect their work.

I had purposely refrained from sending surveyor Kelley with this party, inasmuch as he had expressed an opinion as to which of the two lines on the north bounds of Jerseyfield was the correct boundary, he assenting to my view that it would be better to send surveyors who had never traced this line, and obtain their independent conclusions as to which was the right one. While this party was engaged in retracing the line, I availed myself of Mr. Kelley's thorough knowledge of the region to aid me in selecting points proper to be occupied in the triangulation; and, under his direction, the signal station upon the elevated summit now known as Mt. Jerseyfield, was made ready. The peculiar advantage of this station consisted in its nearness to the north line of the Jerseyfield Patent. This summit being determined by triangulation and connected with the vast net-work of lines in the interior, could be tied, by a measured transit line, to the boundaries of the patent, and thus — ultimately — the results of the new survey of the Jerseyfield line be oriented and located.

It is not necessary to go over the daily work of these survey parties in detail. The results are shown upon the maps of their survey. The work under Messrs. Koetteritz, Snell and Jones, was carefully done, and the measurements and topography carefully taken.

Soon after leaving the West Canada creek the line brought them into the clearings at Wilmurt Corners, in the county of Herkimer, along old marks and stone fences which, in the memory of the oldest in-

habitants, had been known to be the Jerseyfield line. The wilderness was, however, soon entered again and the experts soon detected old lines of marked trees coming in from the southward and ceasing upon the line which they were retracing. These they identified as lines of the original allotment of the Jerseyfield patent, and they were found to agree very closely with the ancient field notes. Lot corners of Vrooman's patent were also discovered and at 472 chains and 10 links (5 miles, 72 chains, 10 links,) they suddenly came out upon the shores of a lake which was immediately identified as the "first lake" found by Vrooman in 1768.

Vrooman's distance was in chains was.....	481.00 chains.
The new survey made the distance from the shore of Canada creek	472.10 chains.

A difference of.....	8.90
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This difference showed that the original measurement must have been made with what land surveyors term "drag-chain," up and down hill without attention being paid to the exact horizontal distance. In those days this loose measurement up and down hill is said by tradition to have been common; while the ordinary remark at the end of ancient field notes saying, "with the usual allowance "for highways and bridges," was very indefinite.

This first lake, known now as Mount's lake, was crossed by the line near the outlet without difficulty; and the survey party, cheered by the belief that they were upon the true boundary, pushed on.

At 664 chains and 50 links the line reached the shores of another lake known to the guides as North Branch lake.

This was evidently the "second lake" of Vrooman, which, by his measurement, was 672 chains from the West Canada creek.

The difference between the two measurements here amounted to 7 chains and 50 links.

North Branch lake was crossed by triangulation; and despatches were sent to me at Albany announcing these discoveries, and the probability that Jerseyfield lake was, without doubt, Vrooman's "third lake," and that the survey party would reach there on Saturday, July 7th. The despatch also announced shortness of supplies, and urged that provisions be sent to them at Jerseyfield lake.

Leaving Little Falls on the morning of the 7th of July, I reached Jerseyfield lake the same night, myself, baggage, instruments and the provisions for the party being drenched by severe thunder storms en route, notwithstanding rubber blankets. The roads were in a fearful condition. No spring wagon could endure the strains to which

the heavy lumber truck was subjected in passing over boulders and crumbling corduroy. The instruments were carefully packed in hay for transportation.

On arriving at Jerseyfield lake I found that the survey party had not yet arrived. I went by boat to the extreme western end of the lake, but pistol shots and shouts failed to obtain any response, and we were left in doubt as to the whereabouts of the party. Judging from the ancient field notes I could not see how, on the course which they were running, they could avoid striking this lake. At evening I was conducted by Mr. Kelley to a point on the west shore of the lake and shown old marked trees which he believed would prove to be the old Vrooman line.

July 8th was Sunday. About noon on Sunday one of the guides arrived from the survey party, bringing out one of the men with him, who had been taken sick. By dinner time the packmen and subordinates of the survey party had come in after provisions. The line was still a mile west of Jerseyfield lake, but was coming directly to it. In the afternoon the packmen marched back through the woods carrying food for the surveyors who had remained in camp.

On the morning of Monday, July 9th, I set out with Mr. Kelley and ascended Mt. Jerseyfield, finding its height by barometer to be 2,323 feet above the sea, but only 387 feet above Jerseyfield lake, which lay hidden in a valley three miles to the north-west.

The solar transit was set up, and repeated observations of the sun taken to determine the direction of the true meridian, which, by comparison with the magnetic observations gave the declination of the needle at $8^{\circ} 57'.37''$ west from true north. The latitude of this station is $43^{\circ} 15' 50''$ and its longitude $74^{\circ} 43' 55''$.

Observations were secured to numerous wooded peaks, and a plan for connecting with the triangulation to the northward and eastward by way of Mt. Hamilton and Mt. Matteson, drawn but the station was so low and flat that many important points could not be observed at this time, and it became necessary to defer these measurements until a high tripod or tower could be built which would elevate the instrument sufficiently to clear the obstructions.

Written orders as to the details of this work were drawn up and forwarded to the chief signalman, then on Mt. Hamilton, for reconstructing the signal on Mt. Jerseyfield to a height of eighty feet above the rock.

The view from Mt. Jerseyfield is peculiar; few sharp peaks being visible, except far to the eastward. The mountains are disposed in

long ridges extending east and west, forest covered, and extremely wild; and, although many lakes exist in the low-lands, not one body of water can be seen from this summit; all is an unbroken sea of woods.

At 8:30 P. M. I reached Jerseyfield lake, and found surveyors Snell and Jones awaiting me with the news that the line would probably reach Jerseyfield lake next day. They were working over difficult ground; the old marked trees were few and far between, and the line difficult to trace.

Advantage was now taken of clear weather to secure observations for local time and azimuth.

The morning of July 10th was bright and pleasant, and all were anxious to learn where and at what distance the line would strike Lake Jerseyfield. The atmosphere was clear, pure and delicious, and the lake, although sparkling in the morning sun, yet partook of the deep azure of the sky.

Under my directions Mr. Kelley placed signals upon the prominent points, and a location near a sand beach on the western shore was selected for the measurement of a base-line from which to triangulate and measure the width of the lake where the line now being surveyed should cross it.

In order to obtain the variation of the needle at numerous points, and the true azimuth of the line, wherever it should cross the lake, repeated observations of the sun were taken with solar transit, both direct and reverse as well as meridian observations of the sun for latitude.

The declination of the needle was found to be $9^{\circ} 12.0$ west of true north at the station at West point on the west shore of the lake, and $9^{\circ} 02'.87''$ west of true north at East point. The direct and reverse true azimuths along this line were practically identical; the magnetic needle showing a local attraction between the stations of about nine minutes of arc.

The most marked local attraction, however, was discovered at the station on Long point; a high rocky promontory which juts into the lake from the north shore, a sudden changing of the Earth's directive magnetic force amounting to $3^{\circ} 25'$, being discovered. The distance from West point is only half a mile, and so great a local attraction of the needle as that found at Long point, can only be accounted for by the existence of magnetic iron ore somewhere in this vicinity. The time is not distant when the valuable deposits of iron existing upon the State lands will be eagerly sought, and there is no doubt, that with careful management, such mines may become a source of great public profit without detriment to the forests.

It was near noon, when a distant shout on the western shore of the lake, warned us of the approach of the surveyors tracing the ancient line. To the delight of Mr. Kelley they emerged from the forest at the very point which he had believed was the original line. The line came down to the shore through a cluster of spruce trees which bore ancient ingrown marks, but no inscriptions cut upon the bark. The age of the line was 115 years, and the old experts were decided in their opinions as to the identity of this line with the original line run by Vrooman in 1768. If any proof were wanting it was given by the comparison of the old and new measurements. Vrooman's original notes were opened and the following entry noted: "Then continuing my course S. 58° East at 9 miles 58 chains *to the third lake,*" soil "stony, timber hemlock, spruce, pine."

The 9 miles and 58 chains are equal to . . . 778 chains.

Our new measurement made the distance
to this *third lake* . . . 763.90 chains.

Difference . . . 14.10 chains.

This is $930 \frac{60}{100}$ feet shorter than the distance as recorded by Vrooman; but our experience of these old lines, measured rudely with "drag-chain," when compared with true horizontal measurements, which must always be much shorter than the irregularly measured lines made us consider this third agreement with the ancient topographical notes a sufficient proof of the identity of the line retraced with that originally run by Vrooman. Re-measurements of such old lines, when made with precision, frequently show such differences between the old "drag chain" and modern horizontal measurements.

We had now found the true north line of the Jerseyfield Patent, identified by its striking the three several lakes at nearly the distances recorded in the old notes. It is only necessary to add, that in the sections so far traversed on this line, nowhere near it, to the north or south, were there any other three lakes, or any two lakes, which could be thus located on any line of similar bearing or within miles of it.

Another fact was settled by the work so far done on the Jerseyfield line. If any double line existed it must be to the eastward of Jerseyfield lake. The assistants reported to me that the line had been retraced from the West Canada creek on an average magnetic bearing of S. $55^{\circ} 02'$ E. The result from the mean of all the readings taken along the line by computation showed a change from the original bearing (S. $58^{\circ} 00'$ E.) of $2^{\circ} 57'.15$, being the resultant of the com-

bined annual deflections, eastward and westward, of the magnetic needle since July, 1768.

The line having been found on the eastern shore of Jerseyfield lake was now located by signals placed at either end. The station on the western shore was an immense boulder, bedded at the water's edge among other immense stones marked as hereafter described.

This boulder or block of granite was, upon its upper surface, flat; and being large and nearly rectangular, made an excellent instrument station. The transit was set up upon it, and the station centre shown by a drill-hole in the rock, subsequently to receive the nickel plated copper bolt recording the line thus monumented.

The surface of this great stone was 14 inches above the lake. It is surrounded and immovably secured by other boulders. The astronomical azimuth of the Jerseyfield line where it crosses the lake, was found by the mean of seven observations to be S. $63^{\circ} 56' 42''.1$ East.

This was, consequently, the azimuth of the line in 1768. Comparing it with the original compass bearing we find S. 63° , $56.7'$ E. true.

Less the original compass bearing . . . S. 58° , $00.0'$ E. magnetic.

Difference 5° , $56.7'$ West.

This difference is the amount of the magnetic declination in 1768, and must be recorded as having been 5° , $56.7'$ west of true north in that year.

The average Declination in 1883, *at this point of the line*, was found to be $9^{\circ} 07'$ west of true north.

Deducting from $9^{\circ} 07'.0$

Variation in 1768 $5^{\circ} 56.7'$

Shows a change of $3^{\circ} 10'.3$ to the westward, or thirteen minutes more than the average change (2° , $57'.15$) along the line west of this lake.

This change of $3^{\circ} 10'.3 = 190'.3$, *is the resultant* of both *eastward and westward movements of the needle*. In the discussion of these magnetic observations I have come to the conclusion that at the period of the original survey of Jerseyfield, the declination at this important station was $5^{\circ} 56'.7$ West of true north, and since that date the declination has always been to the west of the true meridian, although for about thirty-five years following 1768, there was a slight change eastward, ceasing about the year 1803, with a declination of $5^{\circ} 23'$ West. By 1838 the needle must have crept back to its declination of the year 1768, the annual change to the west-

ward being more rapid until 1860, when computation based on adjacent lines would indicate that the movement west had reached 4'.3 per year. This annual westerly movement is now probably greater than in 1860, but can only be precisely determined by repeated observations.

To the eastward of Jerseyfield lake I found the line very difficult to follow.

Assistants Blake and Francisco coming in to Jerseyfield lake, from a reconnaissance to the eastward of State lands in Hamilton county, reported that a few miles east of Jerseyfield lake, they had struck the "double line of Jerseyfield," and had followed the northernmost line for miles. This northernmost line they said was known to lumbermen as the "Brayhouse line," but from whom the title was derived they were unable to learn.

The question now to be decided was, whether the true line which we had retraced so far, was the northernmost or southernmost of the two lines to the eastward. We had so far retraced 9 miles 58 chains of the old north line, the length of the entire line being 23 miles and 57 chains; there remained 13 miles and 29 chains to be retraced, verified and located.

Having need of the services of assistant Snell as expert in retracing the Herkimer and Oneida county line, of which a report is hereafter given, I directed him to return to Boonville to organize his survey party there and in Lewis county; the party to rendezvous on July 14th, at Forestport.

At the same time I gave instructions to Mr. Koetteritz to extend the survey of the Jerseyfield line eastward, from the east shore of the lake to the north-easterly corner of the Jerseyfield Patent, along the line of original marked trees of Vrooman's survey.

Mr. Jones was directed to remain with Mr. Koetteritz as expert in regard to line trees. The party, however, by the return of Mr. Snell with his topographer and axeman was shorthanded, and Mr. Koetteritz was ordered to secure other men to replace them. As additional supplies were required, and his next absence would now be for over a month in the wilderness, he found that five or six days were needed in the settlements. At the end of that time the new men and the provisions had been secured, and the tracing of the line eastward from Jerseyfield lake was resumed on July 19th; the new men rendezvousing at Salisbury on the 17th, and marching in on the 18th to the lake.

(SECTION II.)

The second survey party consisted of J. B. Koetteritz in charge, with Griffith Jones as compass surveyor, expert on old lines; A. M. Mosserop, 1st chainman; A. G. Warren, 2d chainman; E. F. Northrop, forward flagman; C. H. Smith, rear flagman; four (4) axemen and packmen, one cook and campkeeper.

Inasmuch as the line was now approaching the most difficult section, it became necessary to know the slightest deflections. I thereupon ordered Mr. Koetteritz to repeat every angle. The measurements were to be made with 50 ft. steel ribbon, graduated to tenths and hundredths of a foot, held horizontal under ten pounds tension by levels attached to brass handles, and aligned by transit. These distances were recorded by each chainman separately and checked by the telemeter stadia wires in the telescope of the transit. At every station the magnetic bearings were recorded direct and reverse, and vertical angles to the tops of the station "flags" or centre poles.

These centre poles were staffs divided for stadia reading, and held vertical by levels and tripods.

By these means great exactness in the measurements, both of directions and distances, were secured, and a positive knowledge obtained by which to test, settle and locate forever the disputed line.

While this party was organizing I returned *via* Little Falls, a toilsome journey,* to the Capitol, and spreading before me the ancient maps of the Jerseyfield and Lawrence patents, examined them in the light of the new evidence obtained. The old field notes of the several patents cornering together at the north-easterly corner of the Jerseyfield patent disclosed, on careful inspection, some surprising differences in the description of this corner.

As this corner would be the terminus of the line now being run by Mr. Koetteritz, and as the entire question as to the proper north line might depend upon this north-easterly corner, I searched every record of the period which gave any account of it.

* The forest roads out from Jerseyfield were in a fearful condition. My transit required to be sent to the instrument makers for repairs after its rough journey. To maintain a good instrument in order for accurate work in the wilderness, it should be kept carefully packed in its box and the box transported in a proper knapsack by one of the men. If a large theodolite; hand-bars and straps and relays of packmen should transport it as soon as good roads and light spring wagons are left behind. This rule should be adhered to whatever may be the objections of the men.

In the original survey of Vrooman I found the following description of this corner:

“At 22 miles, 51 chains on the top of a steep, rocky hill at 23: miles, 7 chains and 33 links down the hill to about the middle of another small lake of about 20 chains over, I made the corner by running at right angles where there is another small lake near adjoining on the north of about the same bigness where we camped Thursday night.”

Thus Vrooman, the original surveyor, makes this corner in “about the middle of a small lake.”

The other subsequent patents which were built up on the Jerseyfield, and cornered at the same north-east corner of Jerseyfield, are as follows, viz.:

(1.) Glen, Bleeker and Lansing's patent (89,297 acres) has for its north-west corner the north-east corner of the Jerseyfield patent; but the ancient maps of “Glen, Bleeker and Lansing's Patent” show the corner, not as “in the centre of a small lake” as Vrooman made it, but as “a spruce tree;” his map (1793) bearing the inscription: “This marked tree stands in the easternmost corner of Jerseyfield,” and under date of 27th of October, 1794, Simeon De Witt, Surveyor-General of New York, gives the following description of this north-west corner of the Glen, Bleeker and Lansing patent, and says: “Beginning at the north-east corner of a tract of 94,000 acres of land granted to Henry Glen and others, commonly called Jerseyfield, at a spruce tree standing about two chains north from a small lake, and marked with a blaze and two notches below on three sides and the letters C. G.; B. B.; A.; S. L. 1793.”

Now, spruce trees do not grow in lakes, or even thrive well in marshes. The corners referred to were evidently not the same.

(2.) Benson township, consisting of 61,503 acres, in the county of Hamilton, is asserted in ancient authorities, to have for its southwestern corner, the north-easterly corner of the Jerseyfield patent. Yet, none of the old maps of the original surveys of that township show this corner located “in a small lake” as described by Isaac Vrooman. On a map of the township of Benson, made from its survey by *Lawrence Vrooman* in 1795, this corner is shown to the northward of a lake, and it is by this surveyor specified to be also the north-east corner of the Jerseyfield patent.

This *Lawrence Vrooman* must not be confounded with Isaac Vrooman, the Colonial surveyor.

Lawrence Vrooman was a resident of Schenectady; and I have not

met with his name anywhere in connection with the original survey of the Jerseyfield patent. His surveys appear to have been made during the present century under the State government. This explanation is necessary, as it is believed that some have been misled by the surname into the belief that the same Vrooman surveyed both patents, and, therefore, must have known the true corners.

It is evident from the field notes that Lawrence Vrooman had no knowledge of the location of the real corner of the Jerseyfield patent as first located by Isaac Vrooman.

(3.) In addition to these two tracts, a third tract, heretofore mentioned as the Lawrence patent, and containing 35,560 acres, also depends on the north-east corner of the Jerseyfield patent.

The original description of this patent is contained in a communication addressed by Simeon De Witt, Surveyor-General, February 1, 1793, to "His Excellency George Clinton, Esquire, Governor of the State of New York," etc., and says: "All that certain tract of land situate in the county of Herkimer on the north side of the Mohawk river, beginning at the most easterly quarter of a tract of 94,000 acres of land granted to Henry Glen and others, and commonly called Jerseyfield, and running from thence the following courses as the needle pointed in the year 1770, to-wit: North, fifty-eight degrees west, along the north-easterly bounds of the said tract of land called Jerseyfield 1,061 chains to a tract of land granted to Thomas Sickels," etc., etc.

These quotations show that it was the intention that the patents mentioned should have one common corner at the north-east extremity of the Jerseyfield; *yet the records of the surveys of all of them differ in their description of the corner from that given by Isaac Vrooman as "near the middle of another small lake."*

This difference in the description of the corners made it necessary to search for each of the lines converging at that point, so as to find, prove and identify the true corner — *if there were but one* — or to find the duplicate or triplicate corners, if such existed. To do this, it would be necessary to retrace those portions of the lines of the Benson Township, the Glen, Bleeker and Lansing tract and of the Lawrence patent, which led toward this corner.

Having decided that this was necessary, I telegraphed surveyor Kelly to meet Mr. Francisco; surveyor in charge of retracing lines in the county of Hamilton; and with Mr. Francisco to make the necessary resurvey of the line between the Benson township and the Glen, Bleeker and Lansing patent. To Mr. Francisco I gave

further instructions for the tracing of the east line of the Lawrence tract, to or from the easterly corner of Jerseyfield, in such manner as to prove where the line, "south 32° west, 300 chains," describing the east bounds of the Lawrence patent had its actual corner.

It is an established principle of law, that wherever the corners or lines have been actually marked upon the ground and deeds given and accepted to those corners by such ancient marks is the ownership limited; and by the lines or boundaries depending upon these corners are the titles to property, both of the State and of private individuals, rigorously confined by the decisions of the Courts.

Such being the law of the land, the location of these important corners, involving titles to hundreds of thousands of acres for all time to come, could not be too carefully studied and searched out before a decision was arrived at, and the monuments finally placed by State authority for the future guidance of the local surveyors.

With surveyors Francisco and Kelly, I sent R. H. Gere as topographer. They were authorized to procure the necessary chainmen and axemen for the work, and ordered to commence on the south line of Benson, at an undisputed portion of the south line thereof, and north line of Glen Bleeker and Lansing; and to work thence westward toward the corner, at once. Estimating the rate at which the party under Mr. Koetteritz would be able to trace the north line of Jerseyfield eastward, Francisco and Kelly would reach the corner before him from the opposite direction, and thus give marked lines to intersect upon, while the united judgment of all the experts could be brought to bear on the location of the corners while each was fresh from his work and alert and interested in all the questions involved.

This section of work being organized, a glance at the progress of the survey party under Mr. Koetteritz is desirable.

By August 1st, his careful and critical search along the north line of the Jerseyfield Patent, had been advanced $14,434\frac{34}{100}$ feet eastward from Jerseyfield lake. The greatest difficulty had been met with in tracing the old line trees; which was the object of the survey. Local attraction was frequent to the amount of from 1° to 5° between back and foresights, and slight deflections in the old line made it often necessary to examine trees to some distance northward and southward of the range. To find and prove the ancient marks it was necessary to cut into the trees frequently and take out the marks, and count the rings of annual woody growth. These blocks from various trees, spruce, hemlock, balsam (fir), beech and yellow birch, with written attest of the surveyors, were forwarded to Albany, where they are now preserved in the office of the survey in

the new Capitol. At station No. 55 on this line, at the corner of lots 87 and 88 of the Jerseyfield Patent, an offset was made and transit traverse run to the Signal station on the summit of Mount Jerseyfield, by which this line has its connection with the triangulation of the interior. The total length of this offset transit line is over two miles. Being a traverse, the line requires to be reduced by computation to one right line and one azimuth. This will be done at once and the results used in platting the line in proper position upon the map projection of Jerseyfield.

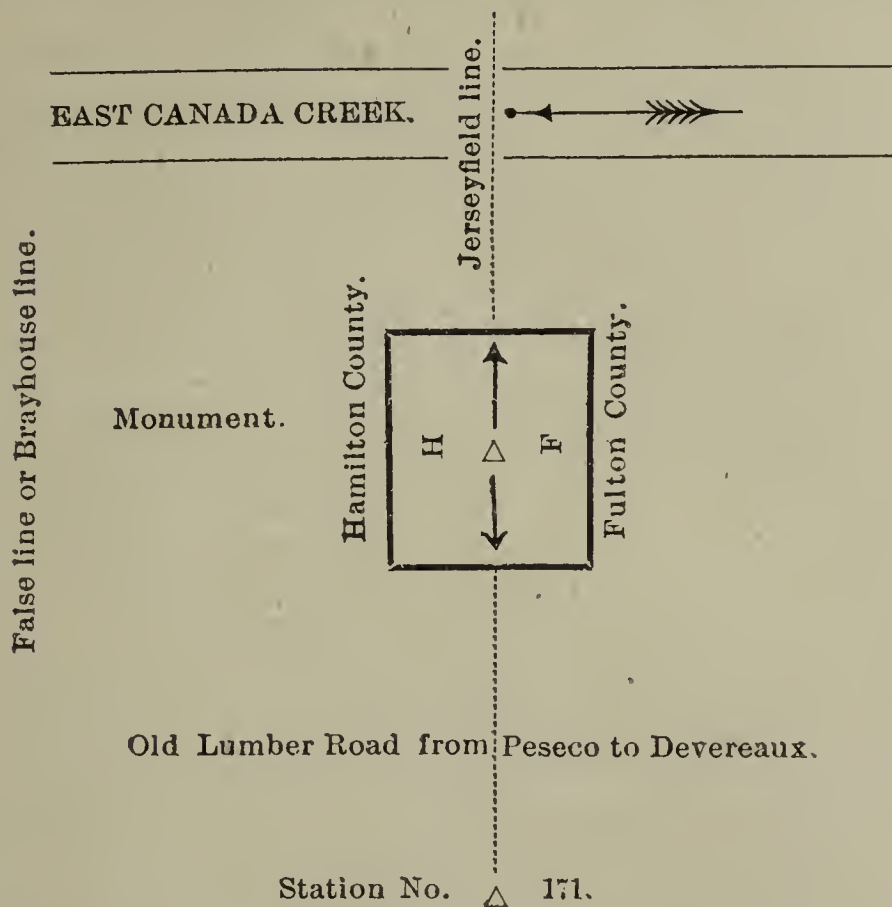
Corners of lots in the Lawrence Patent were found and measured to as the line progressed. At station No. 70, the north-west corner of Fulton county was located and the line continued, forming the boundary between the counties of Fulton and Hamilton. The line south from this corner between Herkimer and Fulton, was found to bear S. 2° West. The region traversed was very wild, as extracts from the journal of the party show that traces of bears and other animals were met with. Mr. Koetteritz writes: "Aug. 9th. Packman sick. Topographer sent to Jerseyfield lake for a pack load of supplies. Line is getting very indistinct, but found some good marks. Heard all afternoon a mysterious noise like that of an engine. Thought it was an old she bear calling young ones. * * * * *

"Aug. 10th. Found that the noise originated from a large colony of blue-herons. (Cranes). The creek running along the line here shows signs of valuable minerals." * * * * *

Aug. 11th to 14th continued the line. Aug. 15th. Despatch from Jerseyfield lake from Superintendent to signalman Brown. Sent guide Daley to mountain. Brown gone. * * * * *

Aug. 16th. Found the "extra" or "double line of Jerseyfield," called by lumbermen the "Brayhouse" line. It was to the northward of the true line 23 chains and 13 links by traverse. Cut out blocks from marked trees on the true line and found them 115 years old. The marks on the false or Brayhouse line (south line of the Lawrence allotment), were not more than 90 years old, or twenty-five years more. Set monument on the true Jerseyfield line. This monument is $11\frac{85}{100}$ feet east of the centre of the old Peseco lumber road, on the west bank of the East Canada creek, and $17\frac{58}{100}$ east of Transit station No. 171 of Koetteritz's line as run by my direction. The monument is a large rock, flat on top, the centre marked with a "drill hole and arrows on each side indicating the direction of the "true Jerseyfield line. On the north side is cut the letter H for the "county of Hamilton; and on the south side the letter F for the "county of Fulton.

The following diagram shows the location of this monument:



Great difficulty and much delay were now experienced in tracing the old line, as the lumbermen had cut all over this section, getting out all the best spruce and soft wood timber, so that it was necessary to search for the line, where clumps of the hard woods, ancient beeches and birches were to be found. As such trees carry less trace of such ancient marks, and more frequently die or become rotten in the interior from the old axe-mark, the difficulties encountered and the anxiety and sense of responsibility felt in retracing a line 115 years old, all chopped over, cannot be understood without experiencing them.

The distance to the East Canada creek by our measurement with steel ribbon, leveled and aligned, was $33,869\frac{0.2}{100}$ feet from Jerseyfield lake, or by computation, 513.16 chains. The total distance now measured from the West Canada creek (head of the "island") being 1,277 chains and 9 links. Isaac Vrooman in 1768 made this 16 miles and 20 chains, or 1,300 chains.

Deducting	.	.	.	1,277 chains.
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The difference	.	.	.	23 chains
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less length by the new and exact measurement. The banks of a stream, however, form a less reliable check than the immovable rock-bound shore of one of these forest lakes. The lake is often so small in this section of the forest that it forms a mere spot upon the map

and is a reliable landmark, especially here, where there are no other small lakes in the vicinity.

Abbreviating the details of this work it is here sufficient to state, that every lake alluded to in the original field notes, was found to be crossed at approximately the distances recorded by Vrooman on the southernmost of the two disputed lines, and that consequently, the northernmost or Brayhouse line was evidently in error and not entitled to be called the Jerseyfield line in any sense.

The line was again proved at the crossing of Dexter lake: Vrooman says, "at 19 miles and 30 chains to a small lake." This would be

.	.	.	.	1,550 chains.
We obtained	.	.	.	1,527.35 chains.

Difference	.	.	.	22.65 chains
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less than the ancient measure. This was within less than half a chain the same as the difference found at the East Canada creek.

It is needless to multiply examples. The three spectacle lakes were next encountered and were crossed by a careful triangulation from a base-line, measured with steel ribbon, and verified on a second base at the eastern end of the chain. The ancient surveyors passed these lakes by offsets with compass and chain. As the triangulation gave the distance with great exactness, it might reasonably be expected that a small change in the difference between the old and new measurements would now be found. At length, on the 4th of September, assistant Koetteritz traced the line to the summit of a hill which, from an elevation of 300 feet, looked down upon a small lake. This was the "steep rocky hill" described by Vrooman, and at a distance of 1,814.03 chains, the shores of the "small lake" mentioned by Vrooman, were reached.

Vrooman described this lake as being "about 20 chains over"—and says that he made the corner "about the middle." To find the corner, therefore, 10 chains distance should be added to our traverse line, making a total of 1,824.03 chains. Vrooman's exact words are: "At 23 miles 7 chains and 33 links, down the hill to about the "middle of another small lake of about 20 chains over, I made "the corner by running at right angles where there is another small "lake near adjoining on the north of about the same bigness."

Vrooman's total distance along the north line of Jerseyfield is, consequently

.	.	.	.	1,847.33 chains.
The new and exact measurement	.	.	.	1,824.03 chains.

Difference	.	.	.	23.30 chains.
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There is no question that this was Isaac Vrooman's original line and that he actually located this corner in the little lake. The difference of 23 chains and 30 links by Vrooman, is the error made by rough drag chain measurements. This difference was almost identical with that found at the crossing of East Canada creek, and is but half a chain from that at Dexter lake. It is possible, that in crossing Jerseyfield lake and the other waters to the westward, Vrooman may have made an offset not recorded; or, with his rude compass may have encountered a deflection on the offsets round the lakes, which, with the errors of the rough chaining with an unknown standard up and down hill, made the amount found by the new and critical measurement with steel ribbon.

When the new measurement with graduated steel tape is corrected for temperature, and reduced to one azimuth, it will prove less than the amount above given, and increase the difference stated.

The little lake in which the line terminated, and which forms the landmark or water mark, of the north-easterly corner of the Jerseyfield Patent, I have identified as the westernmost of three lakes found by the early explorers of this region, the trappers Stoner and DeLine, "who, while hunting, discovered many bushels of dead "fish, principally suckers, which had got over a Beaver dam in a "freshet; and which, being unable to return, had died upon the re- "cession of the waters to the great annoyance of the hunters;"* who in consequence gave the disagreeable name of "Stink lakes," to the chain. They are still thus commonly known to hunters. I prefer to call them after the discoverers and rename them Stoner's lakes.

For the purpose of describing the locality more definitely, I shall call the lowermost and largest lake, situated almost entirely in Lot 62 of Glen, Bleeker and Lansing's purchase, as the lower Stoner lake. This lake has a bay extending northward across the Benson line, into which comes the inlet from the East lake, or De Line's lake. On the north-western shore of the lower Stoner lake, the inlet from Vrooman's lake enters, while the outlet of the main lake flows from its south-western extremity to the waters of Fish creek; and so to the East Canada and the Mohawk river.

On arriving at Vrooman's lake assistant Koetteritz found that surveyors Francisco and Kelley had preceded him, having finished their work in retracing the line of the Benson township, and the north line of the Glen, Bleeker and Lansing purchase; and were now re-

* Simms' History.

tracing the boundary between the Benson township and Lawrence tract.

In retracing the south line of the Benson Township they came, not to Isaac Vrooman's lake, but to the old "spruce tree," described in the field notes of 1793, and erroneously called by Lawrence Vrooman the north-east corner of Jerseyfield. This ancient spruce was dead and crumbling into decay, but bore upon it the original blazes and hacks described by Lawrence Vrooman. It was taken down and replaced by a stone monument; a huge boulder with drill-hole centre to receive the inscribed nickel-plated copper bolt. The title proper to be placed upon it, was left for the decision of the Superintendent. It was necessary to await the completion of the surveys and the discussion of the results before the proper inscription could be settled upon, and the copper plate of the bolt-head engraved and nickel-plated. Meanwhile the marked section of the ancient spruce tree was cut out with care and transported to Albany, and placed in the office of the Survey at the Capitol. Surveyors Francisco and Kelley had also found two other ancient corners near the spruce tree, each one duly marked and witnessed. There was, therefore, an abundance of corners at this point; four corners having been found with marked lines running to them, and each one supposed to be the north-east corner of the Jerseyfield. This was, of course, preposterous; but the existence of four duly marked corners remained as hard indigestible facts.

The location of these several corners is well shown on the accompanying diagram. At the close of the conference with the surveyors and an examination of numerous corners, Mr. Koetteritz returned to his own party at Vrooman's lake; and, in accordance with my instructions, commenced a secondary traverse line, with transit to connect the original Vrooman line and corner with the "corners" of Benson and Glen Bleeker and Lansing's purchase. This traverse reached the old spruce tree corner at a distance of $1,377\frac{69}{100}$ feet (20 chains 87 links) from station No. 337 of the resurvey of Jerseyfield line. At a distance of 4 chains 56 links further (N. 77° E.) the Brayhouse or false Jerseyfield line, was found cornering on the west line of the Benson township. Many additional details of interest might be given of the work done in this department of the survey, but the material facts have now been disclosed, and space and time both compel me to proceed at once to a statement of the results of the work.

CONCLUSIONS.

After an examination of the ancient records and the rediscovery and retracing, by exact methods of survey, of the ancient lines, I reach the following conclusions:

(1.) That four separate and distinct corners were located by the old surveyors of the Jerseyfield, the Glen, Bleeker and Lansing, the Benson and the Lawrence Tracts; and that in regard to these corners the five expert surveyors, who executed the new work and whose several lines here converge, agree.

(2.) That but one of these corners was, and really and in fact is the true north-east corner of the Jerseyfield patent, namely: the corner located in the westernmost of the three Stoner lakes by Isaac Vrooman in the year 1768, which is nearly in the centre of the water that should be called Vrooman's lake, or the West Stoner lake.

(3.) That the said corner is identified by the topography; the line from the West Canada creek crossing lake after lake in the regular order described by Vrooman; and "corners" at last, after "descending a steep rocky hill," in "another small lake."

(4.) That Vrooman, by his method of rough drag-chain work, made the total distance too great from the West Canada creek to his north-east corner in the little lake; but this does not change the line or the corner that he established, as the original lines marked and corners located hold good, at law, notwithstanding any error which may have been made in the original record of measurements.

(5.) That the north-west corner of the Glen, Bleeker and Lansing purchase, was not located at the north-east corner of the Jerseyfield patent, in the little lake described by Isaac Vrooman, but at a spruce tree, marked as a corner in 1793, twenty-five years after the survey of the Jerseyfield Patent.

(6.) That the true line should extend from the south-west corner of the Benson township (the point marked B on the diagram) southerly to the real Jerseyfield corner in Vrooman's lake; the westernmost of Stoner's cluster of ponds; and that thence the east line of the Jerseyfield patent extends, south-westerly, to the corner of the Royal Grant at Devereaux.

(7.) That the Benson Township south-west corner, did not extend to the real Jerseyfield corner, nor properly as far west as the spruce tree corner (now marked by a stone monument of 2,200 lbs. weight, set by the present survey); that the resurvey of the south and west lines of the Benson Township, produced southward and westward,

intersect near a stake and heap of stones, to the eastward of the ancient spruce tree, a distance of 3.56 chains.

(8.) That the south-west corner of the Benson township is *not* at the north-east corner of the Jerseyfield Patent, nor does it touch that patent at any point (a very considerable interval existing between the two patents); but corners upon the north line of the Glen, Bleeker and Lansing patent at the stake mentioned.

(9.) That the stake and heap of stones to the eastward of the intersection of the south and west lines of Benson, may have been considered by some as the true south-west corner of Benson; that such stake and heap of stones at the north-east corner of the Jerseyfield patent do not properly represent the south-west corner of the Benson Township, but may have been placed as the corner of lots 62 and 63 of Glen, Bleeker and Lansing's subdivision or allotment of their purchase.

(10.) That the original survey of the Lawrence Patent bases the south line of that patent entirely upon the original north line of the Jerseyfield, as surveyed by Isaac Vrooman.

(11.) That the south-east corner of the Lawrence Patent is identical with the north-east corner of the Jerseyfield Patent, and is located in the little lake described by Isaac Vrooman, and identified as the westernmost of the Stoner lakes, on the north bounds of the county of Fulton.

(12.) That the north line of the Lawrence Tract is, by the old measurements, properly located 300 chains N. 32° E. as the needle pointed in 1791, from the north line of the Jerseyfield patent between Vrooman's little lake and Jerseyfield lake, or between Vrooman's lake, and a point one thousand three hundred and eighty-two chains therefrom northwestward on the Jerseyfield line.

(13.) That the line known as, or called, the Brayhouse line, is *not* the north line of the Jerseyfield Patent, but is a later, subsequent line, located to the northward of Isaac Vrooman's original line, marked for the north boundary of the Jerseyfield Patent.

(14.) That an allotment of the east portion of the Lawrence tract has been made northward from the false Jerseyfield line or Brayhouse line; leaving an interval between the true line and the Brayhouse line not allotted or taken up although within the Lawrence patent.

(15.) That this unoccupied strip of forest land in Lawrence patent, has been only partially cut upon by lumbermen, and contains between 1,800 and 2,000 acres; and that such part as has not been held by ad-

verse possession against the State for a period of forty years, is still the property of the State, and is valued by qualified experts, having knowledge of the value of timbered lands in that district, at \$4 per acre, or about \$8,000.

(16.) That this strip of unoccupied land terminates with the Brayhouse line, near Black Creek lake, at the head of Black creek, east of Jerseyfield lake.

(17.) That the allotments of the Jerseyfield Patent terminate necessarily at the boundaries of that patent; and, consequently, at the original north line as run by Isaac Vrooman, retraced by surveyors Koetteritz and Jones under the present survey, and verified by the work of surveyors Francisco and Kelley.

(18.) That the allotment of the Lawrence patent, wherever commencing, terminates at its north line 300 chains by the original survey from the north line of the Jerseyfield patent.

(19.) That this north line of the Lawrence patent is the south line of the townships of Nobleborough and Arthurborough produced south-eastward.

(20.) That there is great probability that a gore or interval of unoccupied land exists northward of the Lawrence patent, between it and the Oxbow tract, occasioned by the Brayhouse line having been made the base for the allotment of the Lawrence patent; so that starting too far north, the allotment ran over and beyond the true bounds of the Lawrence tract; and that thus the north line of the outermost tier of lots was made a new north line beyond the true line; and that this new allotment line became accepted as the south line of the Oxbow tract; but that the question cannot be settled without additional surveys.

Should the location of the boundaries of the Oxbow tract prove this to be the case, the State is, here, the owner of another large area, gore, or tract of unoccupied land of 1,800 acres, worth from \$2.00 to \$4.00 per acre, or from \$3,600 to \$7,200; and that no injustice may be done any private owner, inquiry should be made as to the occupancy of such lands and the taxes paid thereon, and descriptions thereof should be rendered to the Comptroller by the assessors; to the end that those who have paid such taxes may be dealt with equitably by the Comptroller, the Attorney-General and the Commissioners of the Land Office.

FINDINGS.

I find, therefore :

I.

That the Jerseyfield Patent is divided into 94 lots, located within the limits described by Isaac Vrooman in 1768.

II.

That none of the allotments, State or private, that may extend northward across the Jerseyfield line to the Brayhouse line are authoritative allotments of the Lawrence tract.

III.

That deducting the strip of land found to be actually an unoccupied southern portion of the Lawrence tract, the allotments of the Jerseyfield patent, as now marked upon the ground, are correct, where based upon Isaac Vrooman's original corner in the small lake described by him and his original line, extending north-westward therefrom.

IV.

That the Benson township does not reach to or corner with the Jerseyfield patent.

V.

That the Lawrence patent is subdivided in a complicated manner ; and the cause of all the difficulty has been the disputed south line of that patent.

VI.

That there exists an unoccupied strip of forest land in the Lawrence patent, between the north line of the Jerseyfield and what is called the Brayhouse line ; which latter line is the base and commencement of the proper allotment of the Lawrence patent.

VII.

That the unoccupied strip aforesaid or so much thereof as has not been held against the State by adverse possession for forty years, is the property of the State.

VIII.

That the allotments in the east portion of the Lawrence patent properly commence and extend northward (or N. 32° E. as the needle pointed in 1793) from the Brayhouse, line as a base, to the north line of the Lawrence patent only, and there terminate ; and that all

other allotments of the eastern part of the Lawrence tract are erroneous.

IX.

That the Caldwell and Sickels tracts are now properly allotted and located upon the true Jerseyfield line, and are not affected by the Brayhouse line allotment.

X.

That in addition to the twenty parcels of State land in Jerseyfield, and the numerous portions within the Lawrence allotment owned by the State, a large tract of unoccupied land have been discovered in the Lawrence patent between the Jerseyfield and Brayhouse lines, which properly appertains and belong to the State; but was not known to exist by the State authorities.

XI.

That there is probability that a similar area of unoccupied State land exists on the north bounds of the Lawrence patent, in the strip of land taken into the Lawrence allotment improperly, between the south line of Nobleborough and Arthurborough produced, and the south line of the Oxbow Tract if the south line of the Oxbow tract prove to be located northward of the original north line of the Lawrence tract.

All the questions growing out of the complications arising from the disputed north bounds of the Jerseyfield Patent have thus been settled. The work has been extremely laborious and, affecting the title to over 300,000 acres of land, worth upward of a million dollars, has been one of responsibility and care.

SECTION II.

CLINTON COUNTY.

The lands of the State in the county of Clinton, have an area of 42,600 acres. They are principally contained in Townships Nos. 3, 4 and 5 of the Old Military Tract. The lands in Townships 3 and 4, were found to have but little value as compared with those in township No. 5, and in consequence of the limited time and means, it was found to be absolutely necessary to give almost exclusive attention to those in Township No. 5.

The desire of the Comptroller and State Tax department that the conflicting surveys made in this township under the old compass method, should be corrected, and order and system brought out of the chaos which enveloped the titles of both public and private lands within this township, made it of the more importance that the questions involved should be settled at once. Surveys, of a partial and irregular nature, had repeatedly been made in this township by order of different Comptrollers and the local authorities, not only to locate the boundaries of the State lands, but to ascertain where the lines of the several lots, adjacent to the State lands, requiring to be accurately assessed, might be.

It had been impossible for the officers of the Tax department to procure accurate descriptions of these lands; yet a decision or judgment of the courts directed that the taxes upon lands in this township should be in accordance with what was known in 1868, as the "New Survey." The mention of a new survey in 1868, implied, of course, that there had been a *previous* subdivision of the township into lots. There was, evidently, a conflict between the old and the so-called new allotments. That such "old" and "new" allotments had in some manner or form been made, was evident from the references thereto in the office of the Comptroller; and it was also evident that in this conflict between the two systems of allotments, existed the difficulty of determining both the location of the State and of private lands, and the adjustment and collection of taxes throughout

the whole township. The fact that the estimated value of all the lands within this township has been placed at many millions of dollars; the great deposits of magnetic iron owned by the Chateaugay Iron Ore Company, being entirely within its bounds, and that more than 10,000 acres of State lands are also located therein, together with the earnest desire of the Comptroller that I should cause a survey to be made which would settle all the disputed questions, led me to believe that this was one of the most important surveys under the law of 1883, requiring my attention.

In order to ascertain, authoritatively, what particular lots, pieces and parcels of land were held to be the property of the State, a letter was addressed to the Comptroller requesting a certified copy of the description of said lands from the deed of Rogers to the State, and the views of the Comptroller as to the lots owned by the State and the area claimed by the authorities. In response to this letter, the following communication was received from the Comptroller:

STATE OF NEW YORK, }
COMPTROLLER'S OFFICE, ALBANY, *October 8, 1883.* }

VERPLANCK COLVIN, *Superintendent*

*New York State Adirondack Survey,
Albany, N. Y.*

SIR — Yours of the 24th ult. was duly received. Inclosed herewith please find marked “1” a copy of the description of lands conveyed August 31, 1868, by Edmund Law Rogers and wife to the people of this State; marked “2,” a copy of the description of lands quit-claimed March 1, 1871, by said Rogers to said people; marked “3,” a copy of Comptroller W. F. Allen’s letter of October 7, 1868, to H. D. L. Sweet, showing Mr. Allen’s opinion of the location, dimensions, etc., of the lands in Township 5, Old Military Tract, Clinton county, actually conveyed to the State by said deeds; and marked “4,” a copy of a part of the “Hannah Murray Map,” referred to in said deed marked “1.”

Therefrom you will see that certain lands in said Township were conveyed to the State, irrespective of the acreage thereof, and that the Comptroller, under whose administration the purchase of said lands was completed, considered, in accordance with our own views that said deed marked “1” conveyed the S. E. corner of said Township, six-tenths the distance of said Township long N. & S., and one-third the distance thereof wide E. & W.

But, if the lands thereby conveyed were surveyed and monu-
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mented, as called for by the latter part of said deed marked "1," then, in such case, we deem it prudent that you should consult the Attorney-General as to whether or not the boundaries and limits of the lands so conveyed are *finally* and legally prescribed and defined by such survey and monuments.

Respectfully yours,

HENRY GALLIEN,

Deputy Comptroller.

1. Description of land conveyed by Edmund Law Rogers and Charlotte M. L. Rogers, his wife, to the People of the State of New York, August 31, 1868, recorded in Clinton County Clerk's office September 3, 1868, in Vol. 58 of deeds, page 49, etc. :

"All the following described parcels or tracts of lands, situate in Clinton county, New York, described as follows, to-wit: Commencing in the south-east corner of Township No. 5, Old Military Tract, Clinton county, New York; thence northerly on east line of said Township No. 5, six miles; thence west three and one-third miles; thence south or southerly, six miles to the south line of the Township No. 5; thence east on said south line three and one-third miles to place of beginning, excepting lots 127, 128, 173, 177, 180, 243, 246 and 250, and one hundred and twenty-one and one hundred and twenty-two, it being understood that this conveyance is to include lots 123, 124, 125, 126, 129, 130, 171, 172, 174, 175, 176, 178, 179, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 244, 245, 247, 248, 249, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, as the same are laid down on the Hannah Murray map, so-called, referred to in the partition deed of the said Township between the said Hannah Murray and John L. Norton, and recorded in the clerk's office of the county of Clinton in Liber H. of deeds, folio 158, etc., reference being had thereto.

"And the said Edmund Law Rogers doth also sell the wood on the aforesaid two excepted lots numbered one hundred and twenty-one and one hundred and twenty-two in conformity to the agreement made between Smith M. Weed and John Hammond, bearing date the fourth day of January, in the year eighteen hundred and sixty-eight, reserving from every separate fifty acres of said two lots last-mentioned, fifteen acres, the location of which acres is first to be made by said Rogers upon reasonable request, two years being allowed by said agreement to remove the wood so as aforesaid sold.

And the said Rogers doth also sell, assign and transfer to the said party of the second part all the claim, right, title and interest of said Rogers in and to all wood, coal, timber, or logs cut upon or received from any of the said lots or tracts hereby conveyed, and all claims, right, title and interest in or to all waste, trespass or damage of any kind done thereon, and will and does release the State of New York, and each and every officer thereof, or of Clinton prison, from any and all such claims, excepting said Rogers does not assign or transfer any claims for trespasses during the past year done or committed on said lands by any person not working for the State, or where the wood, coal or timber was not purchased or received by the State or any of its officers. *Together*, with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the said party of the first part, either in law or equity, of, in and to the above granted premises, with the said hereditaments and appurtenances."

And it is hereby understood and agreed by and between the said Edmund Law Rogers and the said party of the second part that the whole outlines of the whole tract hereby granted, together with the outlines of the aforesaid two excepted lots numbered one hundred and twenty-one, and one hundred and twenty-two shall be surveyed, and the courses thereof established by durable stone land-marks or monuments within six months from the date hereof by a surveyor to be named by the State Engineer and Surveyor, the one-half of the expense of said survey and monuments to be borne by said Rogers and the other half by said party of the second part.

2. Description of land conveyed by Edmund Law Rogers to the People of the State of New York, March 1, 1871, recorded in Clinton county clerk's office, March 1, 1871, in book No. 62 of deeds, page 593.

"All those two certain pieces or parcels of land situate and lying in said Clinton county, known and distinguished on the map of Township number five, Old Military Tract, as recorded in the office of the clerk of said county with the Deed of Partition and Release between Hannah Murray and John L. Norton, and being the same lots as are on said map numbered one hundred and ninety and two hundred and thirty-one, and were conveyed to the party hereto of the first part by Rutger B. Miller, Jr., of the city of Utica, in said State, on the 20th day of September, 1870, by deed now of record in the office of said clerk, in book of deeds No. 62, page 518."

3.

COMPTROLLER'S OFFICE,
October 7, 1868. }

H. D. L. SWEET, Esq., care JOHN PARKHURST, Esq., Dannemora.

DEAR SIR — Your favor was received. Your interpretation of the deed is right. Both lines are to be run on the same principle. The State is to have six-tenths of the lot north and south, and in the same proportion according to its length of line east and west. You will make the survey accordingly, and do not be disturbed by any thing that the other party may do or say.

Respectfully your obedient,

W. F. ALLEN, *Comptroller*.

The survey of the township was not made by Mr. Sweet, the difficulties proving very great. A Mr. Featherstonhaugh continued the work, but his efforts were limited to the accurate retracing of the east line of the township.

The views of Comptroller Allen, as expressed in his letter of October 7, 1868, were based upon the assumption that the township, or "lot," as he terms it in his letter, was rectangular and of such dimensions that, if a section at the south-easterly corner, extending six-tenths of the distance along the east line, north from the south-east corner, with a breadth of three-tenths of the township were taken, it would include the lots mentioned in the deed and shown on the Hannah Murray map therein alluded to.

These lands, therefore, certainly required to be surveyed and located, and preparations for the field work were immediately begun.

The first step was to examine the history of the early surveys, so as to disentangle and separate the conflicting views as to the location of the boundaries.

Immediate search was, therefore, made, through the State departments, for all papers or maps bearing upon the location and subdivision of township 5. The survey of the Old Military Tract was made in 1787, under authority of the State, by Cornelius Tappen, R. Cochran and George Flemming. The east line of Township No. 5, being a portion of the outer limits of the patent, were located at this time by the compass line run by George Flemming. The original surveys of the townships were examined, and it was found that the earliest record was the map of the original survey made by R. Cochran in 1787, upon a scale of forty chains to the inch. No figures are given upon the margins of this map to show the dis-

tances actually chained; but a comparison with the scale proves it to have been considered as a rectangle, eight hundred chains on a side, and containing one hundred square miles, or sixty-four thousand acres. Cochran's map is among the official records of the State, and is authentic and accepted as the first or original survey of the bounds of the township, and the allotment *proposed*.

The subdivision or allotment of the township by Mr. Vaughn was made about thirty years after Cochran's survey, and its allotment, as shown upon Vaughn's map, forms what is now known as the "old survey." This map bears an inscription addressed to the then clerk of supervisors of the county of Clinton, which reads as follows:

"To H. K. AVERILL, Sr.:

"SIR — Agreeable to your request, in behalf of the supervisors of
"the county of Clinton, I send herewith a map of Township No.
"5, Old Military Tract. The north half of this town was intended
"to be turned into lots to contain 320 acres each, and the south half
"into lots containing 140 acres each. But the proprietors, in order
"to make a division among themselves, made an arbitrary map of
"3 lots a mile square, and divided the town accordingly, which
"map was sent to me, as their agent, to sell by. But finding that
"impossible I was directed to have the old corners established, and
"an accurate measurement of all the lines of lots on the north half
"of the town made, which was done by Col. Vaughn in the sum-
"mer of 1824, and this map is a correct copy of the original made
"by Vaughn, which I am now selling lands and conveying their
"lands by, and the same as the one that was furnished the office of
"the town with and on which they have made their assessments,
"and will so continue to do, for it is the only survey now made of
"said town. The south half of the town, I presume, is as incorrect
"as the north part of survey.

"LEWIS RANSOM,
"Agent for the proprietors."

This map bears the indorsement of Henry K. Averill, clerk of the board of supervisors February 21, 1827, and has been adopted in the Comptroller's office as the only map of record of allotment by actual subdivision of what is called the "old Survey" of Township No. 5.

Examining this map, as to the width of the township east and

west, I find that it shows twenty lots along the north line, the width of which are as follows, commencing at the eastward :

	Chains.
Lot No. 1.....	39.80
Lot No. 2.....	43.43
Lot No. 3.....	42.74
Lot No. 4.....	36.14
Lot No. 5.....	47.20
Lot No. 6.....	38.49
Lot No. 7.....	42.11
Lot No. 8.....	44.30
Lot No. 9.....	37.30
Lot No. 10.....	35.52
Lot No. 11.....	46.20
Lot No. 12.....	26.50
Lot No. 13.....	50.75
Lot No. 14.....	30.20
Lot No. 15.....	44.50
Lot No. 16.....	47.45
Lot No. 17.....	36.25
Lot No. 18.....	46.70
Lot No. 19.....	35.00
Lot No. 20.....	72.58

Width north side of township..... 843.16
or ten and a half miles and 3.16 chains.

This computation proved that even under the "old survey" allotment there could be no question that the township exceeded the width of ten miles (as claimed to have been located by Cochran;) by more than half a mile; and the cause of the difficulty experienced in locating the lots owned by the State, in accordance with the so-called "new survey," was the fact that the dimensions and area of the "new survey" allotment differed, very materially, from the "old survey," as to the real dimensions of the township itself.

The "map referred to in partition deed of said township, between Hannah Murray and John L. Norton," and recorded in clerk's office of the county of Clinton, in volume H. of deeds, p. 158, (see deed of Rogers to the State,) I find to be the only record or representation, officially of record at the period, which in any manner represents the so-called "new survey."

This important map has no record of any measurements upon it,

and shows merely a theoretical re-allotment ; which was here clearly intended to subdivide the entire township into 300 equal lots.

Not one of these lots has its length or breadth given upon the map, and the map is without scale or indication of its proportion to nature.

This is all there is of this so-called "new survey." Yet it is by this "Survey" that the State holds its lands and collects assessments upon the adjacent property.

It is essential, therefore, that we consider this apparently insignificant bit of paper carefully.

The first question is: what was the scale of this map?

By measurement the map is found to be about $14\frac{3}{10}$ inches wide and $14\frac{4}{10}$ inches long. Cochran's survey of the township made it a square ; ten miles on each side.

If the dimensions of the so-called "new survey" map are tried by an assumed scale of 60 chains to the inch, we find ($14.4 \times 60 = 864$ chains) the length and breadth of the township, nearly coincide with the allotment width by Vaughn's subdivison in 1826 ; called the "old survey."

Assuming this scale of 60 chains to the inch, the "new survey" map, gives for the width

Of the township	864.00 chains.
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Vaughn's old survey allotment gave	.	843.16 chains.
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Difference	20.84 chains.
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It is singular that this difference agrees almost precisely with a narrow strip of lots about 20 chains wide shown on the map of the original survey of the Township by Cochran in 1796.

On this map this strip of land 20 chains wide, extends along the entire westerly margin of the township from north to south.

In 1874, an assessment survey was made by Mr. William E. Smith, and the results were shown upon a map filed in the office of the Comptroller, June 17th, 1874. This map gives the south half of Township No. 5, in accordance with the "new survey" allotment, as required by the order of the Court.* It shows each of the

* The following is the order of the Supreme Court (commonly called the "decree of the Court,") which gives directions as to the manner in which assessments shall be levied in township No. 5.

THE PEOPLE, Ex. Relat. JOHN L. NORTON,	}
vs.	
The ASSESSORS OF THE TOWN OF ELLENBURGH, in the County of Clinton.	

Beardsley & Carey, att'y. on filing writ of alternative mandamus, and the return of the said assessors thereto, and on motion of Mr. Beardsley, of counsel for Relator, and, after hearing Mr. Reynolds of counsel, opposed, no sufficient cause for the contrary being shown.

“new survey” lots as having an area of 240 acres each, and by the scale of the map, and the acreage of the lots, it is evident that they were then considered to be each 30 chains east and west, and 80 chains north and south ($\frac{80 \text{ ch} \times 30 \text{ ch}}{10} = 240 \text{ acres}$). By the “new survey” the township was divided into 30 lots east and west. Now 30 lots, each 30 chains wide, would make the township 900 chains wide east and west, $= 11\frac{25}{100}$ miles.

Still more recently, by order of the Comptroller, Mr. C. W. M. Johnson took up this greatly vexed question, of the location of the bounds of the State lands, in order to construct a map by which sales might be made to certain settlers or squatters upon these Prison Lands of Dannemora, under a Special law passed for that purpose.

Mr. Johnson comes to still another conclusion; and on his map makes the so-called “new survey” lots to be 28.78 chains east and west, and 81.80 chains north and south, giving to each an area of $235\frac{42}{100}$ acres ($\frac{81.80 \times 28.78}{10}$).

Using his value for the width of the “new survey” lots, the township would be $870\frac{40}{100}$ chains, or $10\frac{88}{100}$ miles wide, east and west.

To recapitulate: Four independent surveys or estimates had been made of the width of the township.

In 1796	Cochran's measurement gave	.	.	10.00 miles.
1826	Vaughn's allotment	.	.	10.53 “
1874	Smith's assessment map	.	.	10.25 “
	Johnson's land map	.	.	10.88 “

The differences between these several surveys were so great as to be only explicable on the theory of general uncertainty as to the real boundaries of the township itself.

Before, therefore, we could undertake to set apart and monument the lots belonging to the State, it was necessary to dissolve this uncertainty by rigorous measurements of the length and breadth of the township. This determined, the real dimensions and area of the State lots could be easily found.

The survey of the township having been determined upon, the proper methods to be taken to secure the degree of precision needed had next to be considered.

Ordered: That a peremptory mandamus issue to the assessors of the town of Ellenburgh, in the county of Clinton, commanding them at the next assessment so to assess township number five, Old Military Tract, being in said town of Ellenburgh, so far as regards the lots of Relator, as that the assessment roll will correspond with and be in conformity to the map of said township accompanying the deed of Partition of April 10th, 1822, copies of which have been served upon said assessors, by numbering the lots assessed as numbered on said map, and in the manner particularly stated in the papers upon which the motion for an alternative mandamus was founded.

The problem required that the length of each of the sides of the township should be ascertained with exactness.

The boundaries, chiefly in doubt, were the North, South and West lines of the township, the east line being known from measurements made in 1871, when that line was run with transit by Mr. Averill. The measured transit line run in 1877 through township No. 4, about three-quarters of a mile south of the south bounds of Township No. 5 could be used to find the deflections of the south boundary from a right line, and could be tied to the new measurements and monuments, to be set by the special transit lines, measured with steel ribbon.

The organization and arrangement of the twelve special survey parties, which were to be placed immediately in the field, caused some little delay; and, as I was, moreover, unwilling to place all of the parties in the field until contracts had been made as to the rates of compensation to be paid to the engineers and subordinate employees, a few days were passed in consultations. Written contracts having been made by the several surveyors selected to take charge of the field-work, the arrangement of the parties and assignment of men to duty was at once commenced.

Mr. H. K. Averill, of Plattsburgh, was appointed to take charge of the work in the County of Clinton, and directed to make a reconnaissance of Township No. 5 with a view to perfecting the plan of survey. He was instructed to make search for the anciently marked corners of the township, and to visit certain elevated points near the lines, and determine which of the signals, heretofore established by the Adirondack survey, were visible from these new hill stations, and could be used to connect the new work with the surveys of the interior.

In accordance with these instructions, he proceeded with his signalman to reconnoitre the lines of the township, commencing on July 5th, and was so fortunate as to find each of the original corners of the Township. This preliminary work was completed on July 11th. The interval between this date and the 30th was occupied by the erection of signals.

The signal built near the south-east corner was called "Pyon," and was so named from being located on the Pyon patent.

Caanan signal was constructed about four and a half miles north from the north-east corner of Township No. 5, and nearly on the east line of Township No. 6.

The signal on Birch Hill near the Chateaugay Iron mines, and
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that on Sanborn Hill near the lower Chateaugay Lake were designed to connect the south-western and north-western corners with the primary triangulation at the Lyon Mountain station of 1878.

On Wednesday, Aug. 1st, assistant Blake arrived from Albany to inspect the progress of the preliminary work, and returned immediately to report to the Superintendent.

The measurement of the north bounds of the township was commenced on August 3d from the north-east corner, along the said line westward. The true meridian was determined by astronomical observations and the azimuth of the line as run by transit. This azimuth was tested by assistant Glover at different points along the line, with a portable transit with solar attachment.

The north-east corner of the township is monumented by a marble post, set about the year 1868 by direction of Mr. Rogers, the then owner. This post was found to have been deflected from the vertical by frost, and was again truly centered by Mr. Averill by reference to his station-marks of 1871, which were found intact. Mr. Averill reports of this monument that "I found it standing in the roots of a beech tree, which had been the original 50-mile tree marked by George Flemming in 1787."

From this post the north line of the township was traced by transit, all angles being carefully repeated and distances measured by steel tape, with spring balance level attached, the temperature being read off at every station.

The survey partly consisted of ten men in addition to the assistant in charge, Mr. H. K. Averill. One transit-man; one line-searcher, pioneer and head flagman; four axemen; two chainmen; one rear flagman; one man acting as camp-keeper and cook. They encamped along the line, moving their tents and baggage forward as the measurements progressed.

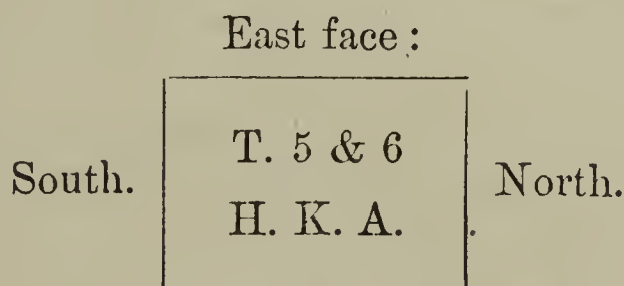
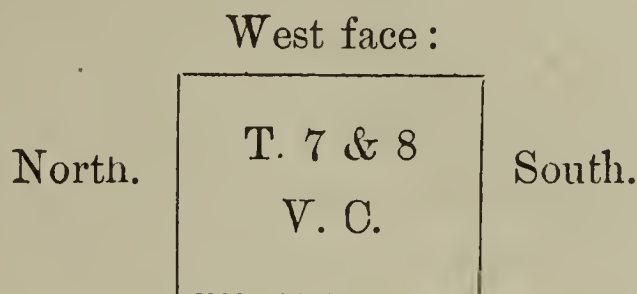
The marked trees of the "old survey" line were frequently met with and measured to, but nowhere was there any trace of the so-called "new survey" referred to in the deed of Rogers to the State.

The measurement of the width of the township along its north bounds was completed on the 20th of August. The north-west corner was found to be an old and decaying beech stub, which was dug up and replaced by a large block of native stone, duly marked as a monument. The drill hole in the top of this monument represents the centre of the Transit Station, being Station No. 133, and distant $10\frac{75}{100}$ miles from the opposite north-easterly corner of the township.

This monument also marks the south-west corner of Township

No. 6, the south-east corner of Township No. 7, and the north-east corner of Township No. 8 of the Old Military Tract.

It was temporarily marked as follows:



August 21st, the measurement of the west line was commenced southward from the stone monument set on the 20th. On the 22d, a beech stump was found bearing marks of the "old survey."

On August 24th, the line was completed as far southward as Sanborn Hill, and connection made with the signal station at that point. On the 30th of August, a broad stream called "the narrows," between the upper and lower Chateaugay lakes, was reached, and crossed by triangulation from a base line upon the shore, to the left of station No. 197; the triangle side No. 197 and No. 198, crossing the stream, being computed at $941\frac{92}{100}$ feet.

On September 7th, the time of service of several of the aids expired, and some delay was experienced before other men could be procured to fill their places. Skilled chainmen, accustomed to exact measurements with steel ribbon, carefully leveled and held to regular tension, by spring balances, etc., are difficult to procure, and have, usually, to be trained specially for this service. New men were secured and trained to the work, but the measurements proceeded slowly and required for a while the constant attention of the chief of the party. The "old survey" line was found to be curved and irregular, and a constant search had to be maintained for the old line trees. Ninety-seven years had now elapsed since the original survey under Cochran, and a great number of the marked trees had died and disappeared during the interval; those that remained had the marks so ingrown that only deep chopping would reveal them.

Progress in the identification of the line and measurements was consequently slow.

On September 20th the party was visited in camp by the Superintendent on his round of inspection of the work of the survey parties in each of the several counties. The south-west corner of the township was visited, and the inscriptions made upon the trees by the old surveyors examined. Trees marked by Vaughn at the time of his allotment in 1826 were sound and a proof-block cut from an original line tree of Cochran, counting by annual rings of growth, back to the year of his survey, was attested by the names of the party present, and transmitted to the Survey Office in the Capitol at Albany for record.

Mr. Averill was directed to increase his force and continue the work, and for that purpose he returned to Plattsburgh on the 22d for men and provisions.

On the 10th of October the south-west corner of Township 5 was reached by the transit traverse. The measurements, with steel ribbon, of the western line of the township make it $10\frac{4.2}{100}$ miles in length from the monument set at the north-west corner to that placed at the south-west corner. The location of the south-west corner is in the Cedar swamp on the west bank of the inlet of the Upper Chateaugay lake, and is sufficiently shown on the map of the township accompanying this report. It now only remained to obtain the length of the south line by connecting it with the transit line of 1877. On account of rise of the waters in the Upper Chateaugay lake, which flooded the tree swamps on either side of the inlet to a width of a half mile or more, it was found impossible to extend the survey eastward along the south line of Township 5. The flooded forest, itself naturally a marsh, was impassable for chain (steel tape) measurements, and the dense, impenetrable mass of drowned timber absolutely prevented triangulation across it. The superintendent consequently issued orders for the temporary disbandment of the party. It was thought best to wait until the marsh had frozen over and had become accessible.

On October 25th the superintendent, then maintaining his headquarters in his tent on Lyon Mountain, where he was busied with theodolite work connecting the new signals and transit line work with the Adirondack Survey triangulation of the interior wilderness, sent orders to assistant Averill to meet him for conference in his tent on the peak. The conference was held accordingly, and a plan perfected for the completion of the work. Snow now covered the

mountain peaks, and winter was closing rapidly in, but ice had not as yet made the inlet and flooded tree marsh at the head of Chateaugay lake passable. The work upon the south line of Township No. 5 was therefore resumed at the east end of the line near Pyon signal. A permanent stone monument of rough native rock was placed at the south-east corner of the township, appropriately marked, and the centre thereof indicated by a drill hole, made for the copper bolt to be hereafter set therein. From this monument the traverse line with transit, called the "Pyon line," was run and measured eastward so as to connect with the transit line of 1877. The location of the road to the Junction Kilns, near the west shore of Chazy lake, and the location of that lake, in connection with the roads, railroad and topography were secured while awaiting the freezing of the Chateaugay inlet. Numerous monuments were set for reference points near where it was now thought that the corner of the State lands would come; one, on the south line of the township, of granite, estimated to weigh 1,500 pounds, and another smaller monument, further along the line, as a reference point. The remainder of the work proved very complicated, especially at the south-west corner of the township where what is known as Kellogg's Gore; a strip of lots on the west side of Township 4, located by Silas D. Kellogg in 1822, was found, and the north-west corner of Township No. 4 was demonstrated not to be identical with the south-west corner of Township No. 5, thus proving the existence of two separate corners on the south bounds of Township No. 5, viz.: Vaughn's corner of 1826, at station No. 302 of our transit line, being the south-west corner of Township No. 5, and another corner a mile to the eastward, along the said south line of Township No. 5, which was the north-west corner of Township No. 4, and the north-east corner of lot No. 18 of Kellogg's Gore. The hemlock tree marked for this latter corner by Kellogg, in 1822, was here found in good condition.

By December 11th the cold had become intense, and ice began to form rapidly on Chateaugay lake. The marsh at the head of the lake was now accessible, the ice being safe to men keeping sufficiently apart. The measurements were, therefore, resumed and successfully completed; and by means of a sled, drawn by long ropes, the stone designed to mark the south-west corner of Township 5 was brought to the station, and placed as permanently as the softness of the ground permitted.

A large stone was also set at the north-west corner of Township

No. 4, and a large cedar post at the corner of lots 18 and 19 of the Gore.

This completed the field work. Assistant Averill returned to Plattsburgh on December 14th, and commenced the platting of the lengths of his base-lines, and the drafting of the topography upon the map of the township, which was completed on the 19th of January, 1884, and is herewith transmitted.

CONCLUSIONS.

After a careful consideration of the results of the field work in this section I reach the following conclusions:

(1.) That the "new survey," referred to in the deed of Rogers to the State, does not exist, and never has existed, as an actual allotment or survey of Township No. 5, in the Old Military Tract.

(2.) That the real dimensions of said Township No. 5 are as follows:

North line,	. . . . .	10.75 miles.
West line,	. . . . .	10.42 "
South line,	. . . . .	11.31 "
East line,	. . . . .	10.21 "

(3.) That the real area of Township No. 5 is, in round numbers, allowing for the curves beyond the right lines given above, $113\frac{85}{100}$ square miles, or 72,864 acres.

(4.) That the allotment shown on the map of Vaughn in 1826, and known as the old survey, was actually made, and the lines run by magnetic compass and marked upon the trees.

(5.) That the country being, in numerous places, underlaid by magnetic iron, the compass needle was frequently deflected in an extraordinary manner, and the irregularities of the so-called "old survey," by Vaughn, were the result, to a great extent, of local attraction of the needle.

(6.) That the "old survey" allotments, as shown by Vaughn's map, are the only allotments in use by land owners and the proprietors of the great iron mines within the township.

(7.) That the re-subdivision of the entire township into lots, in accordance with the Hannah Murray map, into three hundred equal parts, would be mathematically impossible, and if attempted would be enormously expensive, entailing—if run by transit—the location of 40 transit lines, each averaging $10\frac{7}{10}$ miles in length, and could not be done accurately at an expense of less than \$20,000 to \$30,000, and might cost \$50,000; without any adequate reason

therefor, beyond the order of the court requiring assessments to be levied in accordance with the Murray map, or so-called "new survey."

(8.) That it is practically impossible to divide this township into three hundred equal lots, on account of the irregularities in its boundaries, and that it is unnecessary, if possible, as there is an existing allotment.

(10.) That, finally, the entire question of the area and location of the lands owned by the State narrows down to two propositions only:

FIRST PROPOSITION.

The intention of the Hannah Murray map, (or so-called "new survey,") was to divide the assumed mile squares in the south half of Township No. 5 into lots containing equal thirds of Vaughn's "old survey" allotment.

Under this interpretation the State would be entitled to three and one-third ($3\frac{1}{3}$) of the old survey lots east and west, and six (6) lots of the old survey north and south. This would give the State an area largely in excess of the 10,000 acres hitherto held to be the area of this block of the State lands.

SECOND PROPOSITION.

Another hypothesis is that adopted by Comptroller Allen, as shown in his letter of October 7, 1868, and as explained by the communication from the late Deputy Comptroller, under date of October 8th, 1883. This proposition is that the State is entitled to a tract in the south-east corner of Township No. 5, six-tenths ($\frac{6}{10}$) of the length of the township north and south, and three and one-third tenths ($\frac{33}{100}$) of the township east and west. The objection to this theory is that the State purchased certain lots only; that these lots were intended to be thirds of the old survey approximate mile squares, and that the lines, if now run under this second proposition, would cut across the lines of the "old survey" lots, disturbing ownerships and arousing interminable disputes and litigation.

FINDINGS.

Adopting the first proposition as the most equitable, and as the most economical one for surveying, I find the following to be the location of the several lots owned by the State in Township No. 5:

DESCRIPTION

Of lots owned by the State of New York in Township No. 5 of

the Old Military Tract, as conveyed to the State by Edmund Law Rogers in deed bearing date August 31, 1868, viz.:

Lot 130 (of the Murray map) is the east two-thirds of lot 87 of Vaughn's allotment.

Lot 129 (of the Murray map) is the west two-thirds of lot 86 of Vaughn's allotment.

Lot 126 (of the Murray map) is the west two-thirds of lot 84 of Vaughn's allotment.

Lot 125 (of the Murray map) is the east one-third of lot 84 and the west one-third of lot 83 of Vaughn's allotment.

Lot 124 (of the Murray map) is the east two-thirds of lot 83 of Vaughn's allotment.

Lot 123 (of the Murray map) is the east two-thirds of lot 82 of Vaughn's allotment.

Lot 171 (of the Murray map) is the east one-third of lot 107 of Vaughn's allotment; and the west bounds of lots 190, 231, 250 and 291 of the Hannah Murray map, are the west bounds of the east one-thirds of lots 114, 127, 134 and 147 of Vaughn's allotment, and similarly lots Nos. 172, 174, 175, 176, 178, 179, 181, 182, 183, 184, 185, 186, 187, 188, 189, 232, 233, 234, 235, 236, 237, 238, 239, 240, 249, 248, 247, 245, 244, 242, 241, 292, 293, 294, 295, 296, 297, 298, 299 and 300, of the Hannah Murray map, are respectively one-thirds of lots 108, 109, 110, 111, 112, 113, 128, 129, 130, 133, 131, 132, 148, 149 and 150 of Vaughn's allotment, as originally surveyed and marked, however great the excess in the said lots may be above the original estimated area.

The limited time and means have rendered it impossible to go into this matter in the report with greater minuteness. If required for the use of the Comptroller, the Tax Department or the Land Office, a special description of each of these several lots can be given. The above statement will, however, probably answer every practical purpose.

SECTION III.

LEWIS AND HERKIMER COUNTIES.

BOUNDARY LINES.

The State lands in the counties of Lewis and Herkimer are in small parcels, widely separated. The location of these lands by survey, so as to show them accurately upon the maps, required the establishment of certain primary lines of the patents and counties in which they were situated. Our office experience in regard to these counties and lands had been that there were no starting points of the ancient survey work, available, which could be accurately laid down upon paper and used as a basis on which to construct the land-maps.

The destruction of the records of the county of Herkimer by fire many years since, swept away nearly all the data relating to the subdivisions of the early surveys and land patents in this part of the State.

While these early surveys were, undoubtedly, far from being exact in their measurements, yet the lines located by them are the only marked boundaries and subdivisions of property — whether cleared or forest land — and under the decisions of the courts must be accepted as the legal boundaries and limits of either State or private property.

The directions of some of these boundaries are prescribed by certain statutes which, not having been drawn with a sufficient understanding of the proper technical phraseology, are scientifically indefinite, and only to be interpreted by a study of the condition of engineering and surveying in this State at the time of the passage of the laws in question.

Upon the interpretation of the laws governing the location and direction of the boundaries of the counties of Lewis and Herkimer,
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depends the meaning of the word "north," as used in the statutes ; and upon this, in turn, depends not only the direction of the boundaries of the adjacent county of Hamilton ; and the north and south lines of the large towns therein ; but the acreage of the triangles which those town lines cut off from the old townships. The directions of the lines making given angles with the "north point" are similarly governed by the absolute direction of the point itself, and upon this hinges the whole question of the location of boundaries and the accurate mapping of the lands within these counties.

I have heretofore, in a former report, discussed this subject at some length, but a proper understanding of the work done in this section and the need of it, requires a brief statement of the question before an account is given of the measurements and results.

More than eighty years ago the Legislature placed in the statutes verbal descriptions of the boundaries of the several counties of the State. I extract from the Revised Statutes the description of the boundaries of the county of

LEWIS.

"The county of Lewis shall contain all that part of this State bounded as follows: Beginning at the south-east corner of the county of Jefferson, and running thence southerly along the easterly bounds of the townships numbers seven and twelve in Constable's patent to the north bounds of Scriba's patent ; then along the same easterly to the north-east corner thereof ; then north sixty-two degrees east along the southerly line of Macomb's purchase to the line of the county of Herkimer ; *then north along the west bounds of the county of Herkimer to the bounds of the county of St. Lawrence* ; then along the south-westerly bounds of the said county to the line of the county of Jefferson ; and then along the easterly bounds of the said county to the place of beginning."

I have italicised some of the words so that it may be observed that the east line of the county of Lewis must, by the law, conform to and be identical with the west line of the county of Herkimer.

The statute gives the boundaries of the latter county as follows :

HERKIMER.

"The county of Herkimer shall contain all that part of this State bounded northerly by the county of St. Lawrence ; easterly by the counties of Hamilton and Montgomery ; southerly by the county of Otsego ; westerly by a line beginning at the south-west corner of a

tract called Cochran's patent, and running thence northerly and easterly along the bounds thereof to a line beginning in the south bounds of the tract granted to William Bayard and others, called the Free Mason's patent, where the same is intersected by a line run south from the former fording place in the Mohawk river, at old Fort Schuyler, now called Utica; and running thence north along said line to the southerly line of Cosby's manor; then north-easterly in a direct line to the northerly bounds of said manor, at a point where the same is intersected by the division line between Gage's and Walton's patents; then northerly on the line between the said patents to the West Canada creek; then up the said creek to the north-east corner of Service's patent; and then north to the county of St. Lawrence."

We have to deal particularly with the last three lines in the above description, viz.:

* * "Then up the said creek to the north-east corner of Service's patent; and then north to the county of St. Lawrence."

This appears to be a simple and clear statement. It would seem at first reading that nothing would be more easy than to comply with the strict letter of this law. Yet, as a matter of fact, the description is imperfect, obscure and liable to mislead many of those consulting it.

The obscure and difficult points are:

(1.) It does not specify where the north-east corner of Service's patent is, and there are no records in any of the State departments which describe the manner in which this corner is marked.

(2.) If the magnetic meridian were intended, the declination of the needle at the time and in that locality should have been given in order to furnish a basis for computation and survey.

The law relative to the bearings and courses mentioned in the description of the boundaries of counties and towns is as follows (Revised Statutes chap. 2, part 1):

"§ 3. All lines, which in the foregoing bounds are described by courses indicated by the magnetic needle, are respectively to be taken as the magnetic needle pointed at the several times when such lines were originally established."

It is very unfortunate that the statutes of the State were ever made a vehicle to carry down to posterity a mandatory rule requiring the uncertain and variable magnetic needle to be the standard of reference for all of the most important boundaries of the civil subdivisions of the State.

Throughout the entire mountainous section of northern New York there is hardly a place where the declination of the needle will not differ from its declination on the next adjacent tract.

This local attraction is not usually occasioned by visible magnetic iron ore, nor by magnetic storms. It belongs to each locality; forming, apparently at each station occupied, a local magnetic deflection, more or less constantly attendant upon the needle in its various hourly, daily and yearly movements.

It has, therefore, to be borne in mind that, upon a compass line in this region, every station has its local attraction, from a minute quantity almost imperceptible to a deflection amounting to one or more degrees between back and fore sights upon a right line.

The first and great difficulty in running any long line by the needle has been, and always must be, the fact that the needle does not point alike along a line; in other words, a magnetic meridian is not a uniform mathematical line, but is a tracing upon the surface of the earth of the natural, but somewhat irregular, locations of equal amounts of magnetic force.

Another vital objection to the magnetic needle is what may be termed its "reading error." The same bearing cannot be read twice *precisely* alike by needle, and no two needles will give *precisely* the same bearing for the same line.

These are some of the reasons which make the statute before alluded to absurd. If the statute (§ 3) had been merely an explanatory clause it would have done no harm. It is its mandatory character which has created the difficulty, in requiring the modern and exact methods of measurement to be made on such lines conformable to the ancient and erroneous system.

The special law under which the present survey was being made requires maps of these counties, showing the location of the lands with more accuracy than heretofore. It became my duty to follow the intention of the law in its spirit; and, as nearly as possible, to its exact letter.

In view of the apparent impossibility of reconciling systems so much at variance (within moderate limits) it will be proper to give a somewhat detailed account of the methods adopted in effecting this result.

Special laws and resolutions have been passed by the Legislature at various times looking to the survey and location of the west line of the county of Herkimer.

In 1852 the Commissioners of the Land Office were directed to cause this boundary line to be surveyed.

No work was done by the Commissioners of the Land Office under the law of 1852. It is probable that the lack of a positive knowledge of where the north-east corner of Service's patent was, and the engineering difficulties, discouraged the board from undertaking the work.

In 1876, I discovered that there was no real boundary line between the counties of Hamilton and Herkimer for a distance of upwards of forty miles. This discovery led me to make search as to the location of the Herkimer and Lewis county line, and of that line also no trace was to be found. The compass surveyors, woodsmen and lumbermen nearly all agreed that no line of any kind had ever been run between the counties of Lewis and Herkimer.

In 1881 I was directed by a joint resolution of the Senate and Assembly to locate this line. A topographical reconnaissance, and an examination of the adjacent boundaries of the Brantingham tract was made, and of John Brown's, and the Adgate and Moose river tracts, for the purpose of ascertaining what precise geodesic value should be given to the word "north"—"as the magnetic needle pointed at the several times when such lines were originally established;" such being the requirement of the law.

As the result of these investigations I found that an attempt had been made to run this line by compass at the beginning of the present century; and near the banks of Moose river I found some marked trees which indicated that a compass line (counting back the number of rings of annual woody growth) had been run for the east bounds of the County of Oneida eighty-nine years previously.

Search was made in the County Clerk's Office of the County of Oneida, but it failed to reveal any documents authenticating this east line of that county, or indicating that the line of marked trees found south of Moose river had any legal status, or that it was indeed a county line.

It must be borne in mind that the east boundary of this part of the County of Oneida is by law based upon the disputed boundary of Herkimer county, and intended to be identical with it. If, therefore, the few marked trees found at the north end of what appeared to be the Oneida county line, could be proved to have been located under proper authority of law, then the average astronomical bearing of such trees would be the true azimuth on which the boundary between Herkimer and Oneida counties should be run.

In 1881, therefore, I made careful search for authentic documentary evidence in regard to this Oneida county line, but no good

evidence was obtained that the few marked trees (found south of the Brown Tract) actually belonged to a line running "north" from the "most north-easterly corner of Service's patent," as required by the Statute. Thus the investigation was brought back to the uncertain starting point, the ill-defined north-east corner of the old patent, of which no record could be found.

Satisfied that some of the lines of the Service patent could not fail to be found, I made search during July, 1881, for such lines, examining deeds of owners of property; and, upon the testimony of the inhabitants, and in accordance with the views of all experts in regard to boundaries in this part of the County of Oneida, I traced what was claimed to be the north line of Service's patent eastward to the West Canada creek at a point near where Black creek enters the larger stream. Black creek has its sources in the Jerseyfield patent far to the eastward, and near its mouth tradition has located the initial point of the county line, and the much sought north-east corner of Service's patent.

That the line, which was locally known as the north boundary of Service's patent, should, when traced, come to this point was confirmatory of the tradition. I had no doubt that this was the true north line of the patent; as the deeds of adjacent property so described the lots as to furnish in my judgment sufficient identification; the difficulty was that the shores of the West Canada creek at this point, opposite the mouth of Black creek, are low and flat, and have always been submerged by floods during periods of high water. The line was found to disappear on a broad promontory of gravel and sand; the projecting portion of this promontory had long been swept clear of the original timber; while all traces of the line ceased a quarter of a mile to the eastward.

The problem was: where was the north-east corner? What was this corner and in what manner had it been marked?

Tradition would not answer here. It was essential that the corner should be found in order to start the survey from it.

Not satisfied with the indefinite termination of this north line of Service's patent, I directed resurveys to be made of such of the lines of the adjacent patents as were shown by the official assessment map of the State, (Burr's Atlas,) to converge toward this corner. The south-east corner of the DeWitt Tract,* in Oneida county, appears on this map to corner with the Service's patent at a point where the west line of the Matchin Tract descends to the West Canada creek.

* Part of the old Remsenburgh patent of 1787.

The west line of the Matchin Tract was therefore searched out and traced southward to its intersection with the north line of Service's patent. This point of intersection was on the sandy alluvial promontory in the bend of the West Canada creek opposite the mouth of the Black creek. Every indication pointed to this intersection as having been the north-east corner of Service's patent, but there was no corner, no stake, or stone, or stump, or tree, nothing but the lowland meadow of short wild grass, surrounded by clumps of thorn bushes (*Crataegus Chrus-galli*, LINN.), and elders (*Sambucus Canadensis*, LINN.). This was in July, 1881. Long search, at that time, failed to reveal any other corner, and here, by my direction, a massive monument of native granite, weighing in the neighborhood of a ton, was located, and the point of intersection of the lines marked by a drill-hole in the rock. Here the work on the Service patent lines ceased for 1881, and, other surveys requiring attention, was not resumed until 1883, when the passage of the law requiring me to make surveys showing the location of the State lands in all of the northern counties, made it necessary again to take up work in this section.

The survey of the boundary line between the counties of Lewis and Herkimer, I had found in 1881 to be so expensive a work, if done in the best and most substantial manner; (the only manner in which such lines should ever be run) that I had reluctantly, on the completion of the reconnaissance, deferred the work to await further action by the Legislature.

The passage of the present law, and the urgent desire of the Comptroller that the west boundary line in the county of Herkimer should be located, again drew my attention to the question. After deliberation, I came to the following decision. To map the lands, towns and townships in the western counties, mentioned in the law of 1883, a knowledge of the direction or true bearing and location of the west line of the county of Herkimer was necessary. This being decided upon, the character and extent of survey work required had next to be determined.

The substance of the statutes affecting this question may be reduced to three points:

(1.) That the west line of the County of Herkimer is identical with the east lines of the Counties of Oneida and Lewis. (Compare boundaries of Herkimer, Lewis and Oneida counties as given in the Revised Statutes.)

(2.) That the initial point of the said line is the north-east corner of Service's patent. (3 R. S. 3d ed.)

(3.) That the direction of said line must be the direction in which the north end of the magnetic needle pointed, *at the initial point* referred to or such section thereof as may have been run by needle in the year of the passage of the law.*

After carefully considering all the facts; the topography of the country, the lack of sufficient records relating to Service's patent; the absence of any old corner; and the absence of any continuous line between Oneida and Herkimer counties (notwithstanding the existence of marked trees south of Moose river,) I resolved to review the whole question by a personal examination of the ground, topography, and patent lines, in the hope of being able to find a sufficient section of the east line of the County of Oneida to enable me to get the azimuth (or true bearing from the astronomical meridian) of some line of old compass trees at the locality, so as to ascertain what was the true direction of "north, as the magnetic needle pointed," within the meaning of the statute.

Having settled upon the work to be done I directed assistant S. H. Snell, then (July 10th, 1883) engaged with Mr. Koetteritz in tracing and locating the north bounds of the Jerseyfield patent, to leave that party on completion of line to Jerseyfield lake, and return to Forestport, Oneida county; there to assemble a sufficient survey party for the execution of the measurements.

Forestport was made the base of operations on account of its being situated nearly midway opposite the Oneida-Herkimer section of the long line, of which our survey work of 1881 taught us some traces might be found to the eastward, and which, if it could be proved and identified, would afford the range and direction of the boundary to be run between the counties of Lewis and Herkimer.

From Forestport good roads radiate southward into Service's patent, eastward toward the disputed county line, and northward toward the Lewis county corner. Telegraphic and frequent postal communication was also to be had from this place, so that I could communicate with the several survey parties more readily than at a station back in the wilderness, and receive and answer dispatches from the Capitol immediately.

Arrangements were made for encamping the survey party as near where the line was supposed to be, as practicable, and the search for

* The month, day and hour should have been given, if any scientific value was to be attached to the magnetic meridian.

documents and records relating to the patents and lines with which we had now to deal, was resumed.

An indefinite tradition existed that this Oneida county line had been run in 1802, but by whom or in what manner no one was able to say positively.

The time was limited. August was approaching; many other surveys required attention, and, in October, snow would commence to descend and retard work and so blind the surfaces of marked trees as to practically close the season.

Consequently, this party was ordered to assemble immediately; and, on July 14th, I proceeded from Albany to Forestport, where Mr. Snell and his transitman, Mr. C. R. Hawkins, with the topographer, chainmen and axemen, met me in accordance with instructions.

I had already this season (June 26th) reconnoitered the region through which the work of this survey party was to extend, from an elevated point in the south part of the town of Remsen, Oneida county, which I named, after the owner of the land, Pritchard Hill.

Pritchard Hill is the crest of a semi-wooded range of hills resembling the sand dunes of the sea coast, except that boulders on the skirts of the hills, in places, associate the formation with the drift period. Although the hill is less than five hundred feet above the Black river level at Forestport feeder, it commands a very extended view over the forest northward.

From its summit the vast, almost prairie-like forest of the western border of the great wilderness extends, until, at the horizon, forest, cloud and sky melt into hazy uncertainty. A few ridges or elevations roll across this immensity of forest, but only serve as shadows, without locality or name, in this vast landscape. Far to the eastward wooded hills, nameless and unknown, are distinguishable—the outlying spurs of other mountains that form the western members of the Adirondack system.

The view from this summit showed how difficult was the work before us. It was impossible to reach the corners of any of the important lines directly by triangulation, and I saw at a glance that long and toilsome transit lines would have to be run through the forest to connect the initial points of the great land patents in boundaries. Northward, however, toward Boonville and the Moose river region, the land grows higher, gradually sloping upward from forest covered plains of 1,100 or 1,200 feet to crests exceeding 2,000

feet in height above the sea. Studying these ranges with my telescope, I was at length gratified to find my old station, Gommer Hill, in Lewis county, and further to the left, "Pen Mount," a signal station of the United States Coast and Geodetic Survey, occupied by them while engaged in their transcontinental triangulation, which spreads its network across the Mohawk valley from brink to brink of that great basin, and reaches thence through the heart of the State to Lake Ontario, Lake Erie, and the State of Ohio. Pen Mount was one of these stations, a broad, flattened hill, cultivated to the very top, with a farm-house on the summit accessible by carriage road. The summit of Pen Mount is 700 feet above the Black river canal feeder at Boonville; which, by the canal levels, is 1,124 feet above tide. The levels of the Adirondack Survey have not as yet been extended as far to the south-west as Boonville, the nearest line being that which extends from Lake Champlain across the wilderness, to Lowville, in Lewis county.

These are the most considerable elevations upon this side of the wilderness; and when the fact is considered that the general altitude of the lowlands in this vicinity is rarely less than 1,000 or 1,200 feet, and that all the slight ridges to the eastward are forest covered, the great obstacles thus offered to triangulation may be appreciated.

It was important to know every feature of the ground; and, accompanied by the survey party, I ascended Pen Mount and made a reconnaissance with a six-inch theodolite transit.

From the Coast Survey station on Pen Mount (although the atmosphere was quite hazy) I again saw the low dark ridge which, from Pritchard Hill, I had noticed to the north-eastward, near the supposed location of the Oneida county line. This ridge was evidently quite low, only one or two hundred feet above the surrounding forest, and difficult to locate. Near it, however, was a small patch of light green, an oasis in the dark forest. This, we learned, was a clearing made by one Myers, near whose place the bark-peelers in the employ of the tanners, were busily employed cutting and peeling hemlock trees and stacking the bark. I was now informed by Mr. Snell that it was near this place, during his search for the Oneida county line, in accordance with my directions in 1881, marked trees had been found which were called the "county line."

On Monday, July 16th, therefore, I proceeded with the party to the Myers' clearing, which was found to be seven miles north-eastward from Forestport. The clearing by barometer was found to be 330 feet above Forestport. To the northward the wooded ridge

stretched nearly east and west less than half a mile distant. Ascending this ridge I found the timber comparatively open, the hemlock and spruce having been cut away by lumbermen and bark peelers. The top of the ridge was soon reached and was found to have a height of 170 feet above Myers' clearing.

Search was immediately made for the highest point of the ridge, and a knoll was found a little way to the eastward on the ridge where the rock was exposed — a compact granular gneiss — which would afford a firm foundation for a signal station. From an opening in the timber to the westward, a view was obtained which proved that this ridge commanded all the lowlands to the southwestward as far as Pritchard Hill and Pen Mount, and consequently the forest through which the long boundary line must be run. Southward, in the horizon, some ranges of low, very distant hills were barely discernible in the haze; northward the view was obscured by forest. In order to plat the position of the hill so as to ascertain its value as a station in my plan of work, I set up the solar transit and observed the sun for azimuth and obtained the true bearing of Pen Mount.

Meanwhile Mr. Snell and party had been busily searching the forest for old line marks, but found almost all the older soft wood trees cut. I went with him about a quarter of a mile eastward to a point where he felt sure that in 1881 he had found marked trees of the east line of Oneida county, but a forest fire had since then visited this section, and all marks that could be positively identified were gone. A few weather-beaten stumps and stubs only raised themselves above a dense growth of briars and raspberry bushes. On some of these stumps were scars in the wood that were evidently (from the peculiar form of the mark and contortion of the weathered fibres of the wood) very old axe marks. There were no trees remaining by which to find the direction in which these marks ran. Hunters, trappers and lumbermen had blazed trees at various times for trails and roads, and it was impossible to prove that any of the marked trees found were the proper, legal marks of the boundary between the Counties of Oneida and Herkimer.

Hoping that north or south of this station some line trees might be identified, I placed the party in camp, giving instructions to the line experts to search the whole forest for lines, and to ascertain whether any could be found which might be proved to be located in accordance with the statute. Arrangements were also made with Mr. Myers by which I obtained the right to occupy the summit of

the hill as a signal station, and to cut the timber on the crest obscuring the view. I ordered a signal of the secondary class constructed on the summit, and named the station Myers' Hill.

Leaving the party under Mr. Snell to search for the line and construct the signal, I proceeded on July 17th to Gommer Hill, in Lewis county, to ascertain what other station would be needed in order to connect the signal on Myers' Hill with my previous triangulation stations in the interior. Gommer Hill was the station referred to in the report on the Adirondack Survey for 1882 as the terminus of the lines of triangulation which I had measured across the wilderness from Lake Champlain. The hill is the highest of the southern elevations of the escarpment of that semi-plateau known in Lewis County as the Tug Hill range. It is located seven miles north-west from Lyons Falls on the Black river and, by aneroid, 2,109 feet above tide. From this summit the low, almost imperceptible ridge of Myers' Hill, was difficult to distinguish; but I was able to select stations to the southward and eastward with which it could be connected by triangulation. This was very important as the county line must certainly pass somewhere near it, and could thus be located and mapped in proper relationship to the other boundaries.

Satisfied in regard to this matter, I returned, on the 19th inst., to Myers Hill, and found that the axemen had cleared out the sight lines and that a good view could now be had north and south from this ridge. The direction of the true meridian was determined, and the azimuth of Pen Mount again observed. The declination of the magnetic needle was found to be $8^{\circ} 09' . 6$ West of true North. There was indication of some local attraction of the needle. The rock in some places, near the signal station, appeared to show thin veins of magnetite; but, when broken, the appearance was found to be only superficial.

This day was unusually clear, and, on searching the horizon to the southward, I was delighted to find a long ridge of cleared land showing sharply against the horizon, apparently just south of the mouth of Black creek and the county corner.

This was a great discovery. I saw at a glance that I now had command of the situation. Hitherto the haziness and smokiness of the atmosphere had altogether cut off from view the important fact that there was a cleared ridge to the southward of the mouth of Black creek, which would command nearly the entire length of the Oneida-Herkimer line.

The discovery gave me a new and more rapid method of obtain-

ing the direction of the Oneida-Herkimer line — as soon as the line could be identified — by producing the line to a point on the ridge just sighted to, and then (an offset being made on the distant ridge equal to the distance of the Myer's Hill signal from the old marked trees), the true azimuth from this new trigonometrical station to the offset station to the southward, would be the true range of the line.

With the aid of the transit telescope the buildings were plainly discernible on the ridge — which was estimated to be ten or fifteen miles distant — and I made a careful sketch of a group of houses and barns, together with the fences and clumps of trees upon the ridge, as seen through the telescope. This sketch would enable me to identify the locality and select the station on the high ridge to which I resolved to proceed at once.

Directing the transitman to commence the running of an offset line on an azimuth which would be nearly at right angles to the county line, and directing him to determine the astronomical azimuth of this line, I proceeded, on the morning of July 20th, with assistant S. H. Snell and one or two of the men, by team, over rough woods-roads, across the country to the monument set in 1881 at the intersection of the north line of Service's patent with the west line of the Matchin tract.

A renewed search was now made for ancient records to identify the boundaries and corners of Service's patent. The early records of the State show but two references to the patent, neither of which are of practical value in identifying and proving its boundaries and corners. They have the vague interest of giving the earliest spelling of the name, making it "Servis," which is not the orthography as accepted at present.

The only Colonial record I have found, that gives even the fragmentary bounds of the patent, is the original manuscript dated August 4th, 1768, and recorded in Vol. XXIV of Land Papers, p. 158, Sec'y State's office. This manuscript recites that :

"Pursuant to a warrant from his Excellency Sir Henry Moore
"Baronett Captain General and Governor in Chief in and over the
"province of New York, and the Territories depending thereon in
"America, Chancellor and Vice Admiral of the same," &c., had
"surveyed for Peter Servis, Moses Tibbit, Peter Servis Jun'r., Sam-
"uel Rannion, Peter Miller, Lucas Veder, Peter Frederick, Stephen
"Hipp, Michael Russell, Peter Fias, Coenradt Creutzenburger,
"Michael Gallenger, Andreas Snyder, Nicholas Shafer, George Hipp,
"Johannes West, Adam Rupert, Francis Beard, George Keep,

“ George Stam, Lawrence Leman, Mathias Link, Thomas Morgan
 “ Joseph Mordaunt and John Simms, all that certain tract of land
 “ * * in the County of Albany * * purchased by his
 “ Excellency from the Oneida Indians by deed bearing date the first
 “ day of October, 1876,” * * etc., (giving no statement of the
 “ chained distance of the north line, but only its bearing) “ south
 “ seventy-three degrees and thirty minutes east to Canada creek, and
 “ then down the stream of said creek as it runs,” &c., * *
 “ containing twenty-five thousand acres of land and the usual allow-
 “ ance for highways.”

“ Given under my hand and seal the fourth day of August one
 “ thousand seven hundred and sixty-eight.

“ ALEX’R COLDEN,
 “ Surveyor General.”

This is all that affects the county line question in this ancient document — if it affects it at all. It does not tell what the corner on the Canada creek was, whether stump, stone or tree.

In the Comptroller’s office is a map (old No. 10) which shows a very ancient and faded representation of Service’s patent and adjacent tracts in minute proportions, without scale or distances being shown. On this map an allotment is shown which certainly never was made, as the lands are now held under other and different subdivisions. This map is without date or record and does not tell what the corners of Service’s patent were. It is, therefore, of no value in this discussion. Such being the indefinite condition of the official records, I now made search and inquiry within the limits of the patent itself to see if no trace of accurate records could be found.

At length I fortunately learned that Mr. Henry Broadwell, of Prospect, Oneida county, had in his possession the field notes of Service’s patent.

These important records he very courteously placed in my hands, and I was now possessed of the documentary evidence necessary to prove the lines of the patent upon which the boundaries of the counties depended.

The title of the manuscript, which is owned by Charles A. Mann, Esq., states that this is —

“ A field book of a tract of Land formerly known by Service’s
 “ patent, but now the property of Garret Boon, Esq., Situate in the
 “ county of Herkimer and State of New York. Surveyed into lots
 “ in 1795. By Calvin Guiteau.”

The following is a verbatim copy of the field notes of the boundaries of this important patent:

“Beginning at the N. W. corner of a tract of land granted to
 “Thomas Gage and others at a rock maple sapling cornered and
 “marked W. T. G. G. B. 1793 & 1795 standing on the W. bank
 “of West Canada Creek, and runs from thence as the needle pointed
 “in the year 1793 S. $34^{\circ} 30'$ W. along the boundary of said tract
 “603 chains 65 links to the S. W. thereof a beech tree cornered and
 “marked S. W. T. G. B. 1795 Standing in the north boundary line
 “of Cosbey’s Manor, thence along the North boundary line of the
 “last mentioned tract N. $55^{\circ} 30'$ W. 56 chains 60 links to the S. E.
 “corner of a tract of land the property of John Kelley a beech tree
 “cornered and marked S. W. J. H. W. 1793, 1795, thence along
 “the East boundary line of last said tract N. $14^{\circ} 30'$ E. 339 chains
 “14 links to the N. E. corner thereof a rock maple sapling cornered
 “and marked H. W. J. A. G. 1795, thence along the N. boundary
 “of last mentioned tract N. $55^{\circ} 30'$ W. 71 chains 75 links to a
 “beech tree standing in the west bounds of Boon’s Patent, cornered
 “and marked G. B. 1795 standing 1 chain 50 links from the bank
 “of Nine mile creek on a [*course*]* of S. $14^{\circ} 30'$ W. thence N. 14°
 “ $30'$ E. along a line of marked trees. The bounds of a tract of
 “land granted to Henry Lord Holland, and also a tract of land be-
 “longing to Hon. Baron Stuben 668 chains 8 links to the S. W.
 “corner of a tract of land granted to Klock and others at a stake
 “with stones around 44 links N. N. W. from a large rock maple
 “tree cornered and marked G. B. 1793 & 1795 No. thence along
 “the bounds of last mentioned tract a line of marked trees S. 75°
 “ $30'$ E. 473 chains to the Canada creek at a water ash tree standing
 “near the bank of said creek cornered and marked G. B. 1793 No.
 “8, 1795, thence down along the bank of said creek as it winds and
 “turns to the N. W. corner of a tract of land granted to Thos.
 “Gage & others, being the place of beginning containing 23,609
 “acres and 34 rods of land.”

We were now in possession of records which told where the north-east corner of Service’s patent really was, and how and in what manner it had been originally located and marked. This point was described as “a water ash tree standing near the bank of said creek.”† I had had some question in my mind whether the original survey had not made the corner in the centre of the stream, whose bank forms the

* The word [*course*] is inserted.

† The West Canada creek.

east bounds of Service's patent; but the language is explicit; it does not refer to a tree standing on the water's edge or on the bank of the stream, but "*near the bank*," and this tree it was that made the corner.

Now, *how near* the bank was this "water ash tree?" I have heretofore explained the character of the promontory upon which the line (locally called the north line of Service's patent) terminated. This alluvial flat was here almost destitute of timber, and it seemed probable to me that the "water ash tree" was marked as the corner because it was the last line tree or compass tree—the rest of the bank being swampy brush, scrub-willows and elder bushes.

The fact that the west line of the Matchin tract, which was next adjacent on the north, started, not from the bank of the West Canada creek at the extreme end of the promontory, but from a point some distance westward (up the neck of land) on what was called the Service line, as located by me in 1881, had led me at that time to believe that the Matchin line ran north-westward from a well defined corner; and that that was the north-east corner of Service's patent. It was at the intersection of these lines that we had placed the stone monument which marks this south-west corner of the Matchin tract. Proceeding to this monument the instruments were placed in position and the estimated azimuth of the County line laid off, with a view to producing the line southward toward the clearing upon the ridge which I had seen from Myer's Hill. It was exceedingly vexatious to find that the forest upon the farther bank of the creek prevented the immediate trial of this method, and rendered it necessary to multiply stations. From a clearing to the west of the monument, sight was had of an elevated sand-dune to the southward, which was apparently right in line, and but for the intervening forest, might be visible from the monument. Some trees were cut on the opposite side of the Creek, but I was still unable to see the sand hill. Resolved to find some way out of this cul-de-sac, I ran a line on a true azimuth of North $5^{\circ} 14'$ West across the flats, as the approximate bearing for the county line. The axemen clearing the line we reached, after twice intersecting the meandering waters of the West Canada, the top of a little bluff on the north shore of a bend in that stream. From this bluff I at last obtained a view of the lofty sand-dune. Back-sighting with the transit upon the monument at the corner, the telescope was elevated, and to our delight bisected almost the exact crown of the dune, which the men named Lucky Hill by acclamation.

A flag was placed on the newly-discovered hill and set in line by

transit, and then the hill was reached by a roundabout march of about a mile, and ascended and occupied as an instrument station. The summit was found to be a projecting shoulder or headland of a sandy plateau which follows the south bank of the West Canada some distance back from the stream. Its elevated, rounded summit had evidently once been in part drifting sand, and the station was consequently named "High-dune."

High-dune was indeed a fortunate station. From it, the flags set north of the monument were visible, and by a little cutting to the southward we obtained a view of an elevated, cleared ridge, apparently a mile or two away, which seemed to be the very ridge observed from Myer's Hill.

The station on High-dune was made permanent, and the direction of the true meridian was carefully determined. The declination of the needle was found to be $9^{\circ} 26'.7$ west from true north at 10 A. M. on July 21st at this station. High-dune, I also discovered, was available as a tertiary triangulation station, but unfortunately was too low to afford a view of the Myer's Hill offset station or of Pen Mount or Gommer Hill.

On the following day (July 22d) I proceeded to the high ridge, toward which, in order to avoid any mistake, it was necessary to march directly. This ridge when reached was found to be a very commanding point, and from it at length we beheld Myers' Hill, and my telescope soon showed me, that the men at that station had not been idle during my absence. The signal was now completed on the summit, and showed finely against the sky in the lane which had been cut across that ridge. But the hill, on which we now were, did not correspond in topography with the telescopic drawing made on Myers' Hill, and somewhat mystified, we searched still further south, and saw at length still ten miles distant, the ridge with clearing and buildings that I had so carefully sketched. That ridge was evidently too distant to be available, as from it the county corner on the West Canada creek could not be seen, and much additional triangulation would be needed to obtain the distance. There was no time for such delays as would be occasioned by occupying so distant a station.

The problem before us seemed more difficult now than at any time heretofore. It was seven miles north of the corner to the first of the marked trees, which by any evidence could be proved to be a section of the Oneida County line and, even from this commanding point, the multitude of low ridges between us and Myers' Hill, cut off from view the lowlands where the line ran, and we were only

able to see the Myers' Hill ridge with its elevations and depressions forming the horizon in that direction.

At this time I received despatches from Albany which made it necessary for me to return to the Capitol, and leaving assistant Snell to see what could be done in the way of an offset along this first ridge, I started at 3 o'clock in the morning for Forestport, which I reached at 6:45 in the morning. Here instructions were sent to the survey party to measure offsets both north and south of Myers' Hill, and to place flags in line upon the tops of the loftiest trees that were located at the terminus of the offsets. The transitman was directed to remain on Myers' Hill and obtain the true meridian and the azimuth of the offset flags by astronomical observations. One signal party was sent northward to Moose river to ascertain whether a flag-staff signal could not be lashed to the top of one of the highest trees (on the marked line found in 1881 at the crossing of the river) at the same offset distance to the west that Myers' Hill was from the line, and the corresponding offset proposed south of the High-dune and the Barhydt ridge.

July 28th, I learned that the offset work had been found almost impracticable, and telegraphed the engineers to meet me at the village of Grant, Herkimer county, which I reached from Prospect station on the Utica and Black river railroad, early on the morning of the 29th. The assistant in charge of the party arrived at evening with the transitman and signalmen. They reported the requisite astronomical and azimuth work done, but had found the Oneida county line very irregular and uncertain. A vertical signal pole had been lashed into the top of a high tree in line to the northward of Myers' Hill, at the terminus of the offset line from the nearest marked tree found. This work had been difficult and dangerous, as the trees were gigantic hard woods without limbs for sixty feet, and too large to give aid to the arms of the climber, even when his feet were provided with climbing irons. This high signal staff had been found to be affected by the wind so that a very exact determination of its azimuth was difficult.

To the southward, on Barhydt Hill, the offset line ran into a fine grove of sugar maples which obstructed the view to Myers' Hill and, as the owner would not hear of any cutting of the timber, this offset was impracticable. It was now suggested that a large balloon could be sent up and held by ropes over the north end of the line of marked trees, and elevated to the height of a mile so as to show above all the ridges and serve as a signal. This novel plan was re-

jected. A lengthy consultation was now held and the stations, so far occupied, were platted and the points where marked trees had been found noted. Giving the present question due consideration, I came to the following conclusions :

(1.) That inasmuch as the object of this work was to obtain the true direction of the Lewis and Herkimer county line, and the astronomical equivalent of magnetic north in 1802, it was necessary to obtain a knowledge of the azimuth or deflection from the true meridian of the line, run in 1802, on the magnetic meridian between Herkimer and Oneida counties.

(2.) That a right line of known astronomical azimuth, if made to thread the old compass line, could, by offsets to right and left to the old line trees, and subsequent computation, be made to afford the true azimuth needed.

I therefore resolved to settle the question, by running a transit line from the Service patent corner, to the marked trees on Moose river,* nearly 20 miles to the northward ; the survey party to measure offsets to all marked trees which proved to be a portion of the old Oneida county line " north " in 1802. The terminus of the transit line from the signal on Myers' Hill, to the marked trees (supposed there to be the north end of the Oneida county line,) was now marked by a stone monument.

Here arose one last difficulty. The reference line, proposed to be run by transit, must have its direction located so as to " thread " the irregular compass line of 1802, and render it easy to find and identify and make offsets to the old compass trees. The device which I had successfully employed in 1872, in searching for the location of remote lakes in the wilderness, now became again of service. I resolved to have large rockets sent up at night from the marked trees at the east foot of Myers' Hill, and to use the range thus secured, with its astronomical azimuth as the direction of the trial line. Signal rockets were, accordingly, sent for, and after many trials and watching both in clear and stormy nights, rockets sent up by signalmen Wheeler, from the station eastward of Myers' Hill, were observed by transitman Hawkins from the Barhydt hill station, and referred to the lamp-signal at the station in the valley below on High-dune. The azimuth of the rocket station was found, by observations of *Polaris*, to be nearly five degrees west of the true meridian. This was very near the azimuth of the north offset flag on the Woodhull river range as observed from Myers' Hill.

The next step was to settle upon the initial or starting point from

which to run the transit line northward. I greatly regretted that no trace could be found of the "water ash tree" described in the original records as the north-east corner of Service's patent. The length of the north line of the patent (473 chains), if resurveyed from the North-west corner to the North-east corner, should give the position of that corner. Six miles of additional measurement was, however, to be avoided if practicable, and I resolved first, to trace the bounds of lot No. 8 in Service's patent, which occupied that corner of the tract of which I had the field notes. The description of the corners and boundaries of this lot, as given in the field-notes so fortunately found, are as follows :

" Lot No. 8.

" Begins at a spruce tree on the bank of the Canada creek marked
" 8. 9. thence N. $14^{\circ}\frac{1}{2}$ E. 20.50 chains at a post standing in the N. line
" of the Patent, a beech tree N. E. 7 links, marked 7. 8. thence S.
" $75\frac{1}{2}^{\circ}$ E. 53 ch. along the Patent line to a water ash tree standing
" near the N. bank of the Canada creek marked 1793 G. B. No. 8.
" 1795, thence down along bank of said creek to the place of be-
" ginning containing 66 acres of land."

I inspected the descriptions in the deeds of the owners of the property in and adjacent to Lot No. 8, and found that they conformed to the above description. Proceeding to the Adirondack Survey monument of 1881, at the south-west corner of the Matchin tract, the north line of Service's patent was traced north-westward 53 chains, and the north-west corner of the lot was found just beyond the road leading southward to the Twin-rock bridge. This was firmly marked by a post of a fence which here made a right angle. Near by, south-east, were very old beech trees bearing witness marks, easily discernible. This corner was, therefore, sufficiently proved, and from it the resurvey of lot No. 8 was begun. The west line of the lot was first remeasured and was traced southward to the bank of the West Canada creek, here very abrupt. This side of the lot was found to have a length of 1,373.50 feet or twenty chains and eighty-one links, and was measured with steel ribbon, held at ten pound tension by spring balances with levels attached. The original drag-chain survey gave the length at 20 chains and 50 links ; being 31 links less than the present survey. This would be $20\frac{46}{100}$ feet scant of the present measure. A slight projection of level land exists just above where this line strikes the creek and it was probable that an alluvial shore of this width had extended along below the bank.

The original magnetic bearing of this line had been S. $14^{\circ} 30'$ W. The present bearing was S. $19^{\circ} 17.5'$ W., a change since 1795 of $4^{\circ} 47.5'$ to the westward in declination. The allowance usually made in this section of the State at the present time in retracing magnetic lines of that age is about 4° west. Returning to the north-west corner of lot No. 8, the north line of the lot was next retraced, the measurements being made in the same rigorous manner with steel ribbon — kept level under tension and aligned by transit — directly along the old north bounds of the Service patent, identified by the old marks, by the field notes, by descriptions in the deeds of owners, and by the inhabitants.

This line brought us at length directly to the stone monument on the promontory, set in 1881, as the south-west corner of the Matchin tract, and the south-east corner of the DeWitt tract. It forms the boundary between the farm now owned by Wall, on the south, in lot No. 8 of Service's patent, and that of Bronson on the north, in the DeWitt tract. Commencing at the corner near the marked beech trees, the line, after crossing a small brook, at 350 feet begins to ascend to a ridge of sandy hills, from which it descends steeply at 1,800 feet to a tree swamp containing water-maples and black-ash trees; the latter being the "water-ash" trees of the ancient phraseology. The monument was reached at a distance of 3,457.50 feet from the north-west corner of lot No. 8, about 40 feet less than the original measurement, which was 53 chains or 3,498 feet. The measurements were continued for this distance toward the bank of the West Canada, opposite the mouth of Black creek; (the outlet of Jerseyfield Lake) but no mark or trace of any other corner was to be found. Near the monument embedded in the ground was found the dark water-soaked trunk of a black-ash tree; and at a distance of two hundred feet east of the monument another trunk of the same species of tree, rootless and branchless, was found bedded beneath the bank; showing that the shore was changeable and made and unmade by the freshets.

On the whole, I judged it best to commence the Reference Line from the stone monument that I had set in 1881, which was unquestionably the corner of the De Witt and Matchin tracts, and upon the Service north line. That these two patent lines should meet thus, convinced me that they started from some old patent corner; for it was improbable that they should thus intersect and terminate without cause. Now there is no other corner there but the north-east corner of Service's patent, consequently this corner of the De Witt and Matchin would be the long sought Service corner.

The north line of the Service patent has an azimuth from this monument of $99^{\circ} 27' 45''$, or a bearing of $N. 80^{\circ} 32'.15'' W.$ from the true meridian. The magnetic bearing of this line on Aug. 3d, 1883, at 5:30 P. M., from the station on the bluff, (1,657.5 feet west of the monument,) was $N. 69^{\circ} 59'.2 W.$ The magnetic bearing of the line in 1795 was $S. 75^{\circ} 30' E.$, or $N. 75^{\circ}, 30' W.$ On this line, therefore, since 1795, there has been a change in the pointing of the needle of $5^{\circ} 00'.8$ to the northward. This is a large variation and cannot be equally apportioned among the 88 intervening years, as the date of the commencement of the westward movement of the needle is here unknown. It was probably between the years 1800 and 1815. Further study and research of the boundaries run and marked at that time, would probably furnish this important factor in the study of terrestrial magnetism.

The declination of the needle was found to be $10^{\circ} 33'.0$ West of true north at the magnetic station last mentioned. (Aug. 3d, 1883.) On July 22d, 1881, the declination at the Service monument was found to be $10^{\circ} 27'.4$ West. The difference is but $5\frac{6}{10}$ minutes of arc, and allowing for the difference of two years $\frac{5.6}{2} = 2'.8$, which

is the amount of the annual change of the needle to the westward at this time in this locality. Both of these results are the means of repeated observations. It is well to remark that the magnetic observations indicate considerable local attraction of the needle at some points in this vicinity.

While these measurements were being made the detached parties at Myers' Hill and the signalmen had, in accordance with instructions, broken camp and moved southward, to join us at the mouth of Black creek. At evening on August 3, the tents were pitched on the north bank of the West Canada, near where the reference line would pass, and the entire party assembled. Meanwhile the line had been cleared northward on the range adopted and a reference lamp station made at a distance of 2,766 feet to the northward. All night on the 3d into early morning on the 4th, I was busied at the transit, but clouds and gusts of rain prevented the observation of stars, and the reference line was started next morning on the solar azimuth previously determined.

Daylight on the 4th opened with storm, but the work was immediately begun and by noon—notwithstanding several severe showers—over half a mile of the base-line had been run. Every foot of the line was rigorously measured with steel ribbon, and the topography—crossing of streams, slopes, bluffs and marshes—located by meas-

urement and sketched in detail. By evening, more than a mile of line had been run, and posts marking the location of the County line set at the intersection of the line with the highway to Remsen. So far no old line or sign of one could be discovered on or near the reference line. Not a marked tree or a fence line was to be found that ran in that direction. The country, here, was largely cleared, the lands sandy and not very productive on the north bank of the river. None of the inhabitants knew where the County line was—or even in what county their lands were, and our operations were watched with great interest—some remarking that they would now know in what county to vote. As questions of franchise, assessment and taxation and the ownership of public and private lands, depended, in all the counties affected by this line, upon its accurate location; special care was taken with every detail of the measurement.

The instrument used was a six-inch transit theodolite of superior quality, constructed by Stackpole of New York. It was adjusted for collimation by reversal in the standards. The pivots of the axis were extremely true. The object-glass was clear and good and the eye pieces superb Steinheil achromatic lenses. With the sensitive levels and high powers used, the line could be run with great precision. The station rods were held in tripods and made vertical by means of adjustable levels placed at right angles on each rod. The measurements were made with steel-tape, graduated to feet, tenths and hundredths. Temperature observations were made at each station, to bring all the measures to standard. The leveling and tension attachments to the steel-tape have been heretofore mentioned. Every care was taken to insure an exact determination of the line.

It is not necessary to give the details of these measurements. The manner in which the line was started has been given in full, in order to explain the difficulties encountered in securing the evidence on which to base the restoration of the line, and the method finally adopted.

Having thus seen this party well under way, and their work no longer involving any more difficult problem than the running of a direct transit line on the given azimuth northward, I gave them my final instructions, and hastened eastward to watch the progress of the other survey parties.

A month of routine work now lay before the party under assistant Snell. Nearly twenty miles of rough country; a forest full of fallen timber; lay before them. Fortunately woods-roads would intersect the line at many points along its southern part, and arrange-

ments were made by which provisions would be brought by team to meet the party at such points.

The brush and fallen timber made the labor of a large party of axmen continuously necessary. The transitman, Mr. Hawkins, urged the work forward with as much speed as was consistent with the accuracy of work desired; and, notwithstanding delays caused by storm, the survey party was able to average more than 4,000 feet of measured base-line per day.

It was not until 15,650 feet of line had been run in and measured, that a section of the ancient line was found, which was located 110 feet to the eastward of the base-line.

At 16,574 feet from the corner monument the line crossed little Black creek at a bend of that stream in the forest swamp.

At 18,242 feet the ancient line was again found, now 143 feet to the eastward of the base-line; and at 21,675 feet the ancient line was again found 150 feet to the eastward of the transit base-line.

At 23,000 feet north from the initial monument at Service's patent the old marked trees were found 146 feet to the east of the base.

At 23,825 feet the old marked trees were again discovered in what is known as "bark-slash," where the cutting of hemlock trees, for the bark had left the ground almost impassable, on account of timber going to decay, unutilized. At 31,150 feet the main body of the Black river was reached and crossed, here 250 feet wide, and containing some small islands.

At 34,319 feet the old line was again found, and located by offset 125 feet to the eastward of the reference base.

At 35,476 feet the old marked trees were found only 51 feet to the eastward; some local attraction having caused a deflection.

At 38,500 feet Pine creek was crossed. Soon after passing this point the old line swerved to the left and crossed the transit line, and at 47,132 feet from the corner monument, the old marked trees were by offset 165 feet to the west of the transit line or base-line.

The old line was now irregular as though it had been roughly run or was affected by local attraction.

At 43,500 feet the little Woodhull river was reached.

At 49,100 feet the old marked trees were found 50 feet to the westward of the transit base-line.

At 50,928 feet the old marked trees were 126 feet to the westward.

At 53,745 feet the offset from Myer's Hill signal station was intersected, and the old line was found to be located 153 feet further west than had been anticipated.

At 56,522 feet marked trees of the old line were found 95 feet to the west of the transit line.

At 58,255 feet *the old line trees straggled* irregularly along the *transit line*. For a quarter of a mile the old line was here easily traced and its identification was certain. There was now no question that the line we had been offsetting to, and which had crossed our line, was the line referred to in deeds and consequently the statutory line between the Counties of Oneida and Herkimer, run in 1802, and governing; as I have shown, the direction of the remainder of the line as yet unrun, between the Counties of Herkimer and Lewis.

At 64,000 feet the old line was 115 feet to the westward.

At 64,543 feet the transit line reached the Woodhull river; the line descending a deep declivity to the banks of that stream, and running over level ground for 200 feet after passing the stream; ascends a steep bank sloping to the south and east. On the south bank of the Woodhull a small stream enters the river about 125 feet to the east of the line.

At 68,400 feet the old line was 103 feet west of the transit line.

At 72,516 feet two enormous blocks of granite, lying to the south of a small brook, intercepted the transit line; transit station No. 112 being made on top of the southernmost of the two blocks.

At 73,800 feet the line was found 105 feet to the west of the transit line.

At 74,280 feet the old line is $116\frac{30}{100}$ feet west. Here the division line of old marked trees, between the Woodhull and Cramer tracts, was found and connected with the base line by measurements.

At 88,563 feet the old line is only 49 feet west of the transit line.

At 94,700 feet the old marked trees are 75 feet to the westward of the transit line. The offset was made to the corner of lots 6, 7, 12 and 13 of the Devereaux tract, and connects that patent with the base-line.

At 96,752 feet an offset was run to little Otter lake, 1,008 feet distant, and the lake located and its form sketched.

On August '2d, having arranged the work of the other survey parties, I rejoined the party engaged upon this base-line.

The transit line was now but a short distance to the southward of Moose river; and the old marked trees, less irregular and straggling than heretofore, maintained their position at an average distance of 100 feet to the westward. The forest was here principally hard-wood, consisting of large yellow birches, beech trees and a variety of maples; together with spruce and hemlock, the former having been

to a great extent cut by the lumbermen, and the latter by the bark peelers for the tannerymen. Yet the forest was dense, dark and savage, and footprints of deer and bear were observed; so that, but for the stumps and felled timber and occasional skid-ways met with, this section appeared as wild as when visited years since.

The ground was hilly and irregular, yet, covered so deeply with the forest mould, that the fallen timber, branches, leaves and moss, now decayed to a soft spongy mass, formed the only soil. Below this deposit, rocks and boulders and earthless gravel or — rarely — sand, composed the rugged basis, over which the tree roots twisted in their efforts to obtain food. All the humus and the “wooden soil,” the forest trees and plants have themselves, obtained both carbon and hydrogen, from the atmosphere. Neither the rock, the boulders, nor the sands contain those elements. The substance of this entire forest has been and must be derived from the atmosphere. The native rocks contain no carbon, and the mass of carbonaceous material, which goes to make up this forest, can only have been accumulated during countless ages from the carbonic dioxide, diffused in the air and absorbed as food by the trees and plants.

The deep mould or “duff” was a source of much annoyance to the transitman. The tripod legs of the instrument would at times descend so deeply into it, on one side or the other, as to render it difficult to level the transit. Holes had often to be dug in the duff around the tripod legs, to insure a firm placing of the feet upon the rock, and again temporary scaffolds of timber built for the observer to stand upon, in order to prevent his weight pressing upon the elastic “duff,” and thus affecting, however slightly, the support of the instrument.

At 98,434 feet an offset was measured westward from the transit line, and the old marked line was found 85 feet distant.

At 98,921 feet the old marked line had made an angle and was now 36 feet nearer than at the last offset station; the offset distance being 85 feet.

At 100,132 feet the old line had wandered off again further to the westward, and was now 94 feet distant.

We now approached a bluff from which, glistening among the trees, we could see the waters of, Moose river.

At 102, $123\frac{58}{100}$ feet from the Service monument, the south bank of Moose river was reached by measurement with the steel ribbon. The waters of the stream were here too deep and too wide to admit of direct measurement. A raft was constructed from the trunks of

dry spruce trees, and the baggage, tents and provisions of the party ferried over. In transporting the men an accident occurred which might have been serious had not the raftsmen been expert lumbermen. As it was, the party then on the raft were thrown into the river; the raft breaking up in their efforts to maintain themselves upon it. The men escaped to the shore, a new raft was constructed, and the whole party was by nightfall on September 3d encamped on the north bank of the river.

While the ferrying of the party was proceeding, I directed the measurement of the base-lines on the narrow alluvial flat along the river bank. All three angles of each of the triangles were measured; the two base-lines having their initial point in common. This initial point was the last station of the transit line, on the north bank of the river. From this the sub-base lines were measured, one to the east and the other to the west. The length of the side, common to each triangle, forming the width of the river along the main transit-line, by computation from each base, differed one one-hundredth part of a foot. The mean of the two measures was adopted and the transit line continued northward.

We were now approaching the goal. Moose river had for a month been on every tongue, and many estimates had been made as to the date on which the line would reach the south bounds of Macomb's great purchase, and how far the line would come from the most westerly corner of the Moose river tract, and the monument set in 1881, on the boundary between the Moose river and Brown tracts.

The party met with a rough and tiresome experience. Their line had run through slashes of fallen timber, over ridges and broken ground where provisions and baggage had to be carried, with heavy loads upon the back, each day the camp was moved. Often water had been difficult to get. Now we were camped upon the banks of the river, whose clear, pure waters swept swiftly by. The rush of the rapids, mingled with the whispering of the winds among the tree tops soothed the weary that night. With provisions plenty in camp, pure water in abundance, and the work progressing favorably, the men were joyous and contented, and many a song arose around the camp-fire, when the dry spruce logs blazed brightly and cast their ruddy glare far out across the stream towards the dark wall of forest on the opposite shore. Soon the tired men had sunk to rest, and the hoot of the owl alone sounded above the whisper of the waves and winds.

September 4th proved bright and pleasant and all were soon astir.

Occupying the last station made on the preceding day with the Solar Transit, I obtained the azimuth of the line. This done, work was resumed, and at 1 P. M. the south line of Macomb's purchase was reached; being here the south line of the Brown tract, and the north line of the Moose river tract.

The total distance run was $103,824\frac{18}{100}$ feet or $19\frac{6636}{100000}$ statute miles from the Service line monument on the West Canada creek.

The reference monument placed in 1881 on the south bounds of Macomb's purchase at the point where the old line trees (then believed to be the Oneida county line) were found to terminate, was now found to have been correctly placed, and was determined by these measurements to be the most North-easterly corner of the County of Oneida, and located upon the south bounds of the County of Lewis. The transit line terminated $102\frac{67}{100}$ feet to the eastward of this monument, the last-mentioned distance being the correction distance to be applied to the azimuth of the reference line.

The mean azimuth of the reference line, or base-line, has been computed from the astronomical observations at $175^{\circ} 03' 13''.21$; or north $4^{\circ} 56' 46''.79$ west from the true meridian.

Computing the value of $102\frac{67}{100}$ feet for the distance $103,824\frac{18}{100}$ feet, we obtain as a result of the measurement of the base line, the following correction to the astronomical azimuth (Z):

$$(1.) \frac{R \times \omega}{\beta} = - \frac{Z}{2} = - 0^{\circ} 03' 23''.97.$$

which being applied to the azimuth on which the reference line was run gives the azimuth of the county line from the South—as

$$(2.) \frac{Z}{1} - \frac{Z}{2} = \frac{Z}{2} = 174^{\circ} 59' 49''.24.$$

from the true meridian, or North $5^{\circ} 00' 10''.76$ West; which is the determination, by these measurements, of the legal meaning and astronomical equivalent, for this locality, of the word "North," as used in the Statute, and as the true geodesic direction or bearing required by the general law. (*Revised Statutes of 1848, Chap. 2, Part 1.*)

The declination of the needle, therefore, along this line in 1802 was $5^{\circ} 00.1$ to the west of true north. This is an important scientific fact, inasmuch as the years, between 1797 and 1802, are held by some authorities to have been the local time of no variation. There are records which indicate that on Oct. 1st, 1797, in the adjacent County of Jefferson, the magnetic needle was upon the true meridian. The tracing of this line of ancient compass trees,

however, after allowance has been made for the offsets, shows that in this section of the State, the magnetic needle at the time when this compass line was run was over five degrees to the westward of the true meridian; at the very time it was supposed to have little or no variation.

That this is generally true for almost the entire southern and eastern forest area of our northern or Adirondack counties, I have been able to prove by the re-survey with solar-transit of a great number of the ancient compass lines.

The comparison of the magnetic and true bearing of ancient lines in the counties of Essex, Warren, Hamilton, Herkimer, Lewis, and Clinton, show that the lines run in the supposed years of no variation, were in the wilderness generally lines of westerly declination, at that time, of from 3° to 5° from the true north.

I have elsewhere discussed this subject at some length, and will, therefore, confine the present observations to the special base line here under consideration.

The fact that this "north" was actually a north-west line did not surprise me, as I had anticipated such a result.

The present declination of the magnetic needle at the north end of the line just run, was found to be $10^{\circ} 54'$ west of true north.

The declination in 1802, as shown by the old line traced, was almost 5° to the westward of true north.

It is, therefore, evident that since 1802 the north point of the needle has moved still further to the westward about $5^{\circ} 54'$.

If we were able to determine the exact time when the westerly movement commenced, (or the amount of the movement in arc and the direction of the annual variation,) we should be able to obtain the mean annual change of declination.

As it is, the $354'$ ($5^{\circ} 54'$) total change in eighty-one years is probably affected by both the easterly and westerly movements of the Earth's directive magnetic force, and is to be regarded as the resultant of two unequal movements. This is an unquestionable fact. But for this, we might assume the mean annual change to be represented by $\frac{354}{81} = 4.37$ to the westward.

The important fact, in search of which this long line had been surveyed with so much care, had now been attained.

The reports received from the other survey parties in the field of the expense of their sections of work showed me that it was not advisable to attempt, for the present, the running of the east line of Lewis county.

The azimuth of that line had now been determined. To run the Lewis county line with transit—a distance of thirty-five or forty miles through dense forest — and to properly monument it, and test and maintain its allignment by additional astronomical observations, called for more means and time than was now at my disposal. Consequently, on the morning of September 5th, I announced to the survey party, that the work of that Division would cease for the season. All was at once activity in the camp. Knapsacks and pack-baskets were brought forth, blankets folded, the instruments boxed, and a pack-horse brought from the settlement was loaded with a heavy portion of the impedimenta of the camp.

The scene at the breaking up, is shown in plate No. 2, from a photograph of this party which I took at the time, and gives a view up Moose river from the north bank at the crossing of the county line.

Soon the tents were struck and folded, the packs, tripods, transit-staffs and knapsacks shouldered; and by a rapid march the party reached the settlement of Moose river tanneries the same day at noon. They were immediately paid off and returned to their homes.

CONCLUSIONS.

The object in retracing the line between the Counties of Oneida and Herkimer has been sufficiently explained.

The law of 1883 required maps to be made of the several counties of northern New York, and to do this it was necessary to know the true direction or range of the lines or boundaries of said counties.

The statutes of the State made the magnetic meridian at the time when such lines were established by law the governing meridian of all such lines.

The direction of the magnetic meridian in that locality in the year of 1802 had therefore to be ascertained.

A tradition existed that a portion of the south part of the long meridional west line of the County of Herkimer had been run by magnetic compass in 1802, and formed the boundary between the Counties of Oneida and Herkimer.

Research showed us marked trees which were locally called this particular line; but no sufficient documentary evidence existed to prove that it was authoritative, while an examination of the line showed that it was irregular in direction.

Further research brought to light the documentary evidence, proving the north bounds and the north-east corner of Service's patent.

The intersection of the several boundaries of the Matchin and DeWitt tracts upon the north line of the Service patent, at one point near the north bank of the West Canada creek, was accepted as determining the location of the sought-for corner and initial point. The existence of a considerable line of ancient marked trees, far to the northward, which were closely identified by reference to deeds, as being a section of the old Oneida county line, and of similar marked trees near Moose river, was accepted as the northern extremity of the old magnetic north line, whose true astronomical direction was needed in the preparation of the maps.

From these premises the following conclusions were reached :

(1.) That the running of a transit line from the north-east corner of Service's patent, to the marked trees, called the Oneida county line, would discover whether such line were continuous, and identify and settle its location officially.

(2.) That the true astronomical azimuth or bearing from the south monument, set by the Adirondack Survey in 1881, to the marked trees on Moose river, would be the average magnetic declination in the year in which that line was run ; or the azimuth angle, which the magnetic north (called for by the statute) made at that time with the true meridian. It was upon this theory that the line was retraced, and the survey, heretofore detailed, afforded the following results as

FINDINGS.

I.

The word North, as used in the Revised Statutes, referring to the west bounds of the County of Herkimer, is to be interpreted as a true astronomical bearing of north five degrees and ten seconds west, or an azimuth of $174^{\circ}, 59', 49''.24$.

II.

That the boundary line between the Counties of Lewis and Herkimer, run upon this azimuth, will be in compliance with the statute, within the limits of the mean position of the ancient line used as reference and proof.

SECTION IV.
HAMILTON COUNTY.

AND

PORTIONS OF SARATOGA AND WARREN COUNTIES
AND FULTON COUNTY.

The limited time within which this report must be transmitted to the Legislature, compels me to be brief in the account of the work accomplished in the other counties within the limits of the survey. A report upon systematic measurements made for the purpose of settling disputed boundaries, or for securing exact information, should treat the question: *first*, as to the object and purpose of the survey; *second*, it should state all the existing conditions of the question prior to the survey; *third*, it should give the manner in which the research was made; and *fourth*, give the results and conclusions and the facts found in regard to any disputed boundary.

These rules have been followed as far as possible in the present report.

As the object of this survey was to settle the disputed boundaries, which enclosed all the outlying or detached portions of the State lands, the general survey of each and every piece and parcel of the State's property was not attempted. Only the settlement of those vexed questions which laid open the detached and separated tracts to despoilment were undertaken, for the means afforded were far too limited to admit of the survey of every piece and parcel of the State's vast possessions.

In the County of Hamilton the State owns vast tracts of forest; more, in fact, than any other county of the Commonwealth.

Within the limits of this county are upwards of 1,000,000 acres of dense woods, much of it primeval wilderness, and of this area the State now owns 252,072 acres.

This land is so wild and inaccessible as to be secure from the plun-

derers who cut out the best butt logs in the spruce forests near the settlements.

The lands nearest the settlements, therefore, and in the vicinity where lumbering operations were being carried on, needed the most attention; and investigation led me to decide that the lands in the county of Hamilton, which most immediately required survey, were tracts in Palmer's purchase adjacent to and in the counties of Saratoga and Warren; the lands in the Benson township, and lands in the southern and western part of Totten and Crossfield's purchase in the central part of the county.

The retracing of the boundaries in these sections was entrusted to Mr. J. Francisco, who had accompanied me on previous land surveys, and was acquainted with the methods of work in use upon this survey, and with the boundaries of most of the larger tracts.

The first work undertaken in the county of Hamilton was the restoration and monumenting of the south bounds of Benson township — the gold mining district — in which a large number of lots are owned by the State.

This line forms, also, the south boundary of Hamilton, and the north boundary of the county of Fulton.

On August 7th, assistant Francisco, accompanied by surveyor Kelly, and their topographer, chainmen, axemen and guides, began this section of work, where the line of Benson was unquestioned, and proceeded to trace it westward toward the south-west corner, which was involved in doubt, and made lot-lines in that direction, somewhat uncertain. By careful search the old line was found and traced; blocks being cut from the old trees which proved the line and carried the original survey back to the year 1793.

During the interval of ninety years the bearing of the line, which was originally due east and west by the magnetic needle, had changed to North $85^{\circ} 30'$ West, showing a variation in the declination of the needle of $4^{\circ} 30'$ since the time of original survey. Stone monuments were set at seven of the principal lot corners, identified by marked trees and lines of lots, showing the ancient marks, the tree trunks now often dead and crumbling to decay.

A notable exception, to the generally mature condition of ancient timber, was met with upon one of these lines in the case of a yellow birch tree, four inches in diameter, which was found to have been marked in the preceding century. This tree was still, apparently, young and thrifty. Its growth, since 1794, had been very slow, and the experts were amazed at the appearance of ancient looking line-

scores, on its stem. Indeed, it was not until a block had been cut out, and the rings of the wooded growth—thin almost as tissue paper—had been counted, that they were convinced, that this young looking tree could have been marked, as a line tree, at so early a period.

At the south-west corner of the Benson township, assistants Francisco and Kelly found the boundaries, as shown by the ancient marked trees, to be in a very complicated condition. No less than *three* marked corners were found, each apparently the only true corner of the Benson township.

The true corner was, at first, passed by the survey party. Following the ancient line of marked trees, they did not notice the intersection of the west line of Benson, expecting to find it at the termination of the old line. What was their surprise, therefore, when the long and difficult line at length brought them to the dead trunk of a mighty spruce, whose bark was covered with the “honorable scars,”—which, like battle decorations, gave it dignity and value, above all the other aged trees,—to find that no proper system of lines cornered there.

Thus they came to and rediscovered the very tree described in the original notes of the survey of Glen, Bleeker and Lansing's purchase. This was the veritable tree referred to in the record signed by Simeon De Witt, dated Albany, October 27, 1794.

“All that certain tract of land situate in the County of Montgomery on the north side of the Mohawk river beginning at the north-east corner of a tract of ninety-four thousand acres of land granted to Henry Glen and others, commonly called Jerseyfield, *at a spruce tree standing about two chains north from a small lake and marked with a blaze, and two notches below on three sides, and the letters C. G. ; B. B. ; A. ; S. L. 1793.*” * * * *

This was the tree, but it was not the north-east corner of the Jerseyfield patent for the records and survey of the Jerseyfield line had shown that this corner was in the “little lake” discovered by Isaac Vrooman.

Yet, the field notes of Lawrence Vrooman, giving the original survey of this Benson township, begin. “at the north-east corner of a certain tract of land lately granted to Cornelius Glen and others” (the Glen, Bleeker and Lansing purchase), “and runs thence along the same west 1230 chains to the north-east corner of a certain tract of land commonly called Jerseyfield, being also the south-easterly corner of a certain patent lately granted to Jonathan Lawrence and others, then along the same N. 30° E. 300 chains,” etc.

Thus Lawrence Vrooman is found to have believed, that the adjacent corners of the Jerseyfield, Lawrence, Benson and Glen, Bleeker and Lansing patents, were all at one and the same place, and that that place was the old spruce tree above described.

Surveyors Francisco and Kelly now made careful search for the line, which Lawrence Vrooman speaks of, as having been run N. 30° E. in 1795.

No line was to be found running North 30° East, from the ancient spruce tree ; nor, when due allowance had been made for the variation of the needle to the westward since 1795, was any such line found.

By going back eastward upon the old line, a distance of 3 chains and 56 links, Messrs. Francisco and Kelly at length found an old line extending north-eastward, which, when traced out, proved to be the west line of the Benson township, and the east line of the Lawrence tract. This line was found to have a magnetic course of N. 35° E., which, allowing for an intervening period of ninety years, is apparently what the present bearing of the line should now be. On this line were found, not only old "compass trees," but lot corners made by the subdivision lines, coming in from either side according to maps of the old allotments. There was no question that this was the division line between the Benson and Lawrence tracts.

As this point is the location of the most important corner on the boundary between the Counties of Hamilton and Fulton, too much care could hardly be given to secure its accurate survey ; and strict search was, therefore, made to ascertain to a certainty the cause of this discrepancy between the ancient descriptions.

This search was soon productive of results ; a stake, surrounded by a heap of stones, was discovered on the west line of Benson *and here a line was found to come in from the north-west, and corner on the Benson - Lawrence line.* This line was traced and soon identified as the "Brayhouse line," which is the south line of the Lawrence allotment, *but not the south line of the Lawrence tract,* which is located on the north line of the Jerseyfield patent, to the southward

Soon another corner, 1 chain and 54 links to the southward of the last one, was found. Here, also, was a stake, and stones. What corner this was the surveyors could not make out ; and, to prevent any misunderstanding, a diagram was prepared, showing the lines and corners so far found. On this diagram, the corner last found was called corner C. On the same diagram, the location of the

ancient spruce tree was denoted by the letter A ; the intersection of the south line of Benson with the west line of the same by B ; and the corner found 1 chain and 53 links N. 33° E. on the division line between the Benson and Lawrence tracts, was denoted D. The last may be termed the "Brayhouse corner,"

The location of the corners is shown on the accompanying diagram.

DISTANCES.

- | | |
|---|-----------------|
| (1.) Jerseyfield line to the Brayhouse corner..... | * 19.53 chains. |
| (2.) Vrooman's corner of Jerseyfield (in lake) to true Benson corner — Lake * to B..... | 18.57 " |
| (3.) Benson corner (B) to the Brayhouse line corner (D) on diagram..... | 1.53 " |
| (4.) Benson corner (B) to ancient spruce tree (now stone monument) A..... | 3.56 " |
| (5.) A to D..... | 4.53 " |
| (6.) D to C..... | 1.54 " |

The number of corners found, disconcerted the surveyors, and they wrote to the Superintendent, for instructions. Meanwhile, in accordance with the general directions issued to them, at the commencement of their work, they replaced the old crumbling and decaying spruce tree with a massive stone monument, and resumed their measurements along the west boundaries of the Benson township.

While this party had thus been busy, assistant Koetteritz, as heretofore detailed in the report on the Jerseyfield line, had traced the original north boundary of the Jerseyfield patent, to its terminus in Vrooman's lake, nearly twenty chains to the southward of the ancient spruce tree corner, described in the old records as the north-west corner of the Glen, Bleeker and Lansing patent.

Thus the general facts, in regard to the actual location of the lines and corners of these great patents, had been ascertained.

The study and comparison of these results would enable me to reach proper conclusions, and to briefly formulate, in words, the facts as found.

As soon as I received Mr. Francisco's report as to the results of work upon these lines I saw, at once, that the essential facts had been secured. I, therefore, directed the discontinuance of work in this section, and gave instructions to assistant Francisco, to take up the work in Palmer's purchase, on the eastern boundary of the County of Hamilton. The boundaries of this purchase extend also into Sara-

* In another place 27 chains, and another 30 chains.

toga and Warren counties, and required settlement to protect the interests of the State.

In the interval, between the transmittal of assistant Francisco's report and the return of my dispatches, he continued the survey of the west bounds of the Benson township; carrying the line north-eastward, until it crossed the Sacondaga river at Arietta. The line remarked, and the corners of the lots replaced, this section of the work, ceased at the corner of lots, Nos. 90 and 143, near the foot of Sherman mountain. The range of this line continued about N. 35° E. and little or no traces of local attractions were here observed.

The accompanying map and diagram gives an accurate platting of the work done in this section.

CONCLUSIONS.

The result of the surveys made in the Benson township bring to light three ancient corners, at or near the south-west corner of that township; and after consideration, I reach the following conclusions:

(1.) The ancient spruce tree cannot be the corner, for it is neither the corner of Jerseyfield, nor does the west line of Benson come down to it, properly.

(2.) The Brayhouse corner cannot be the south-west terminus of Benson, for the south line of the township does not run to it, if produced westward.

(3.) The indefinite corner (marked C on the diagram) is not the Benson corner, for it complies with none of the conditions governing the location of that corner.

It seems very likely that this is the corner of lots 62 and 63 in the Glen, Bleeker and Lansing patent.

FINDINGS.

As the results of these surveys, I find the following facts:

I.

That the south-west corner of the Benson township is not located at the north-east corner of the Jerseyfield patent, nor do these patents touch one another.

II.

That the ancient spruce tree was not the corner of Jerseyfield.

III.

That the south-west corner of the Benson township should be located at the point of intersection of the south and west lines at the stake whose location is denoted on the diagram as B.

SECTION V.

PALMER'S PURCHASE.

HAMILTON, SARATOGA AND WARREN COUNTIES.

Palmer's purchase is one of the oldest land-grants or patents in this portion of the State. On December 20, 1769, Thomas Palmer, on behalf of himself and certain others, petitioned the Governor of the Colony "praying that the governor purchase at their expense "and in their name from the Indians, a tract of 46,000 acres of land "in the County of Albany, on the north-west side of the south-west "branch of Hudsons river." (State land papers, 1769.)

The Governor seems to have given them generous support, for on July 31, 1772, I find on record the original Indian deed to Thomas Palmer — not of 46,000 acres, but of 133,000 acres! (State land papers, vol. xxxii, p. 43.)

This conveyance transferred to Thomas Palmer, Isaac Low, Dierk Lefferts, Peter Remsen, Robert Leake and their associates, all right and title possessed by the Indians to that mountainous, picturesque and densely forested district, whose southern limit is the north bank of the Sacondaga river, from a point a few miles west of its mouth, at Luzerne, up along the Sacondaga, to where the east line of Bergen's purchase, produced southward, reaches the river; excepting two tracts adjacent to the river — one granted to Philip Livingston *et al* and the other to Christopher Yates and John Glen. The northern limit of Palmer's purchase afterward became the south boundary of Totten and Crossfield's purchase. The eastern limit was the Dartmouth patent.

The valuable forest trees in this great patent were, on the lowlands and along the rivers, hemlock and pine, and upon the uplands spruce. The deciduous forest trees were the red beech, yellow birch

and several varieties of maple. The balsam, although abundant in some places, was not in those days considered of commercial importance, and is not now esteemed.

The pine and spruce were valuable, and the purchasers, after securing title, divided the tract among themselves into several great lots.

Three grand subdivisions were first made, extending entirely across the patent from the south-west to the north-east. The southernmost tier was called the "River Division;" next upon the north was the "Middle Division;" while the last tier of lots adjacent to Totten and Crossfield's purchase was called the "Rear Division." Each of these divisions was, in turn, subdivided into "great lots," by Lawrence Vrooman, between the years 1785 and 1787.

The survey was made, of course, after the fashion of the period, with magnetic compass and drag-chain. The river division was laid out in sixteen lots of unequal size; the middle division into five lots, and the rear division into six great lots.

This was the original subdivision. The "great lots" finally came into the hands of Thomas Palmer, Philip Livingston, Peter Remsen, and Dierk Lefferts. Several of the lots were retained by the State, and thus arose names for some of the "great lots" or tracts: the Livingston tract; the Leffert tract; the Remsen tract; Palmer's lot; State lot, etc. The irregular distribution of the lots among the owners was probably owing to their being drawn by ballot.

All of these tracts or lots are within the limits of the old Palmer's purchase, and in different portions of the purchase are different "State lots," "Palmer lots," "Livingston lots," and "Leffert lots." This explanation should be borne in mind, to prevent any misunderstanding in regard to the particular lots, surveyed during 1883, in Palmer's purchase.

Historical associations, of the most interesting character, cluster around the records of this ancient patent. Obtained from the native Indians, only after permission had been granted by the Court of St. James, under "His most gracious Majesties Royal proclamation" the deed bears side by side with the signature of William Tryon, the last Royal Governor of the Colony, the Indian totem — the hieroglyphic turtle — all now alike in pale brown and faded ink; which alone attests the existence of the once haughty officers and chieftains.

It was in the rear division of Palmer's purchase that three of the most important political boundaries of the Colony of New York met

at one common corner. Here the ancient counties of Tryon, Charlotte, and Albany came together, according to the quaint old map of Claude Joseph Sauthier; and here, in the dense, wild forest, the political changes which have swept over the country have only given new names to the political divisions and have left the ancient boundaries unaltered. The marked trees which separated the counties of Charlotte, Albany, and Tryon, (Royal names of Queen and Duke and provincial Governor,) still remain; but are now the monuments of the slaughtered Warren; and of Hamilton; and of the decisive battle field of Saratoga.

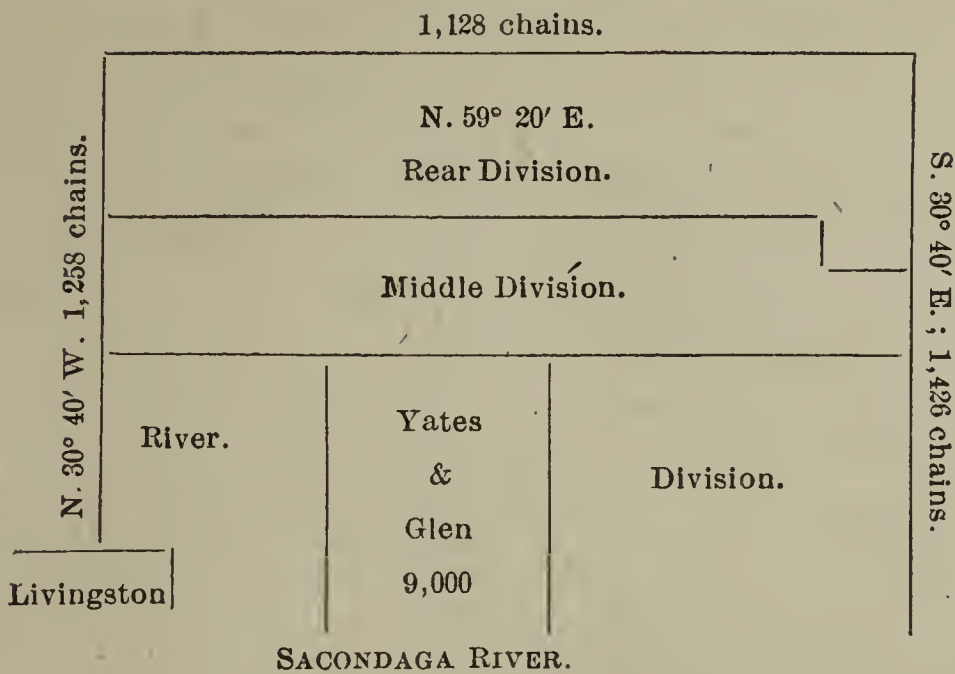
The geographical position of this important corner was unknown. Upon its location depended the ownership of tracts of State land, not only in Palmer's purchase, but to the northward; and the accurate platting of the maps of the counties, made it necessary to rediscover this corner and connect it with the other survey lines.

A still more important reason for a special survey in this section was the existence of disputed or duplicate boundaries, in Great lots 4 and 5, of Palmer's purchase, immediately affecting sections of State lands which are covered with timber. Here, large lumbering companies were actively engaged on the adjacent lots owned by them, and a number of old and conflicting lines having been found, disputes had arisen between the private owners and the land agent appointed by the Comptroller.

To settle the questions raised, I directed search to be made through the ancient records, and after an examination of the documentary evidence and hearing the views of the Comptroller's officers, and of the owners of adjacent property, I found that the disagreement and the origin of the controversy could be traced back to a location in Great lot No. 4.

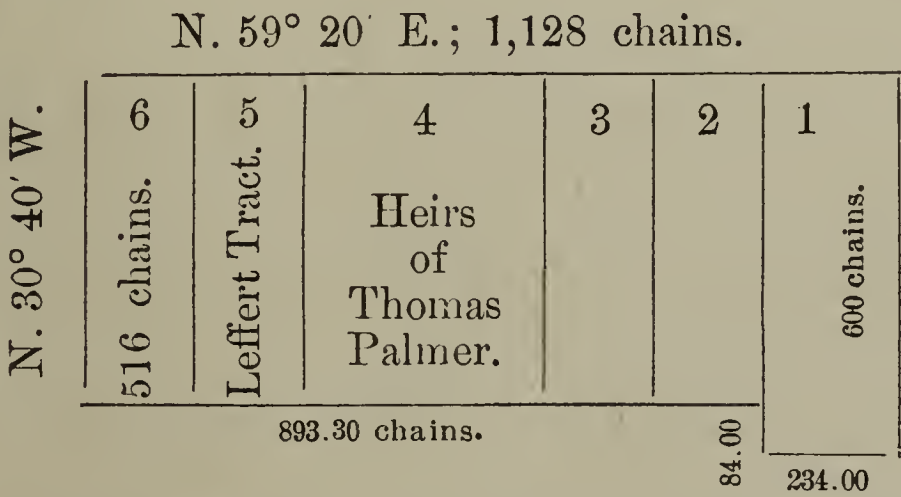
On investigation, it appeared that after the allotment of the "rear division" of Palmer's purchase into six great lots, a subsequent sub-allotment, and second sub-allotment had been made, while there was some evidence which went to prove that even a third sub-allotment had been more recently attempted, nearly upon the plan of the first, but with a slightly different location of the lines of each lot.

The following figure will give an idea of the original patent :



This shows Palmer's purchase as surveyed by Lawrence Vrooman ; not including Bergen's. purchase, as Claude Joseph Sauthier shows it, erroneously, upon his map ; for the last mentioned tract was expressly excepted from Palmer's purchase in the Indian deed, and has not at any time since been included therein.

The location of the six great lots in the "rear division" of Palmer's purchase, will be best understood from the accompanying diagram :



The complications were found to exist in lots 4 and 5 of this rear division.

On January 10th, 1789, Lawrence Vrooman filed in the office of the Secretary of State, at Albany, a map showing the extension of his surveys in Palmer's purchase. This map shows great lots 4 and 5, of the rear division ; lot No. 4 now subdivided into seventeen lots numbered from No. 8 to No. 23.

The question naturally arises, why does the allotment begin with No. 8 ? Further examination shows that this allotment begins in Great let 6, at the north-west corner of the patent. Three long narrow,

lots are shown in the north part of Great lot 6 ; the south part contains 4 lots numbered southward 4, 5, 6 and 7 (each 73.05 ch. + 143.72 chains) and a small strip marked H. T. P. (4.63 ch. + 143.72 ch.)

Thus, passing over Great lot No. 5, the old allotment numbers reach Great lot number 4, at sub-lot 8 ; the seven preceding lots being all in Great lot No. 6, as shown in the annexed diagram of the

1st sub-allotment.

1	2	3	6	4 No.	5 Lot	6 GREAT	7 GREAT	H T P	GREAT LOT "Leffert Tract."	No. 5.	8	9	10	11	12	13 No. 4.	14	15 P	16 H	North tier.	235.43 chains.	
										GREAT LOT "Leffert Tract."	No. 5.	15	16	17	18 Great	19 Lot.	20	21	22	23	South tier.	280.57 chains.

We might think that the subdivision of lot No. 4 had now reached sufficiently small areas for the purposes of the original proprietors or of lumbermen — but such is not the case.

We next find sub-lot No. 8 in Great lot 4, re-subdivided into 10 minor lots, of about 105 acres each.

Still later, we find that certain purchasers of these lands conclude to make still another subdivision of the north part of Great lot No. 4. The second allotment had made this eight (8) long lots ; No. 8, 9, 10, 11, 12, 13, 14 and the H. T. P. lot. Lest any should be puzzled by the interpretation of the H. T. P., I would explain that it means "heirs of Thomas Palmer."

The last allotment of the north part of Great lot No. 4 proposed the partition of the H. T. P. lot among the seven other lots (Nos. 8 to 14). This would leave but seven lots in the north part of the Great lot.

Inasmuch as lands in this district were now more valuable than in the days when the original survey was made, discussion arose as to the actual dimensions of the H. T. P. lot, and of the entire great

lot No. 4. The State was interested in any change or modification of the lines, being the owner of lots 9 and 15, as well as of numerous adjacent tracts, dependent upon the location of the boundaries of Palmer's purchase.

An examination of the lines was attempted by an agent of the Comptroller, and by the private owners, and some additional lines met with which complicated the matter still more. Such, I found, after investigation, was the condition of these several questions at the time they were referred to me for settlement.

Upon the close of work on the boundaries of the Benson township, I directed assistant Francisco to assemble a survey party to proceed to the north bounds of Palmer's purchase; and retrace that line until the original corners of the Great lots therein should be found. This done, he was to measure the length and breadth of Great lot No. 4 and, from such measured line as a base, trace out all conflicting lines, and locate the true position and ascertain the true area of the State lands.

The survey party was assembled and the work commenced on the 8th of October. On the 9th they succeeded in finding the east line of lot 15 in Great lot No. 4, of Palmer's purchase, and traced it northward to a birch tree which was found properly marked and "witnessed," by ancient blazes upon the surrounding trees. This ancient corner tree was found upon the north bank of a small brook, which winds among the hills until it joins the outlet of Wilcox lake stream, and thence by the East Stony creek descends to the Sacandaga.

The first measurements were made along the eastern bounds of this lot. The ancient line, though difficult to trace, was fully identified, and found to have a bearing of S. $26^{\circ} 30'$ E., showing a variation from the original bearing of $4^{\circ} 10'$ (or $250'$) to the westward since 1789. This was about what the change in declination should be in that locality since the original survey was made. The length of this lot was found to be 274 chains and 38 links, or 6 chains and 19 links less than the original survey. In conducting these measurements still another system of allotment was discovered, sublot No. 16 being again sub-divided into lots of about 28 chains and 14 chains width alternately. At 128 chains the outlet of New lake was reached, and at 172 chains and 84 links the north bank of the East Stony creek was measured to.

At 225 chains and 8 links south from the birch-tree corner, the ancient line between the provincial counties of Tryon and Charlotte

was discovered, having a bearing of South $4^{\circ} 30'$ West. This line could only be found upon the oldest trees. One large spruce was found bearing three sets of marks, attesting the importance of the boundary. Here the last line of lot 15 passes from the present county of Hamilton into Warren county.

Crossing a balsam swamp, and some hills that sloped to the westward the surveyors at 253 chains and 44 links reached another ancient line, which was found to have a bearing of S. $85^{\circ} 30'$ E. This line, after careful examination, was identified as the boundary between the counties of Saratoga and Warren — the ancient north line of the county of Albany separating it from that of Charlotte.

It was evident that they were not far from the point of intersection of the two ancient lines; and on the following morning a search was made for the ancient corner.

The two ancient lines, when retraced, led the survey party into a thick balsam swamp, rich with deep spagnous moss, which grew luxuriantly in the solemn shade of the stately fir trees. Here, at a huge hemlock tree, the ancient lines met. The old tree was rugged and healthy still, and lifted its graceful evergreen foliage high above the slender balsams. On its robust trunk, which, though gray and seamed with age, showed by its firm, ruddy bark its vigorous vitality, the ancient marks were found. Upon the encircling trees the old witness marks were seen — now so deeply ingrown as to carry that delight to the heart of the skilled surveyors, that the litterateur experiences at the discovery of some long-lost mediæval manuscript.

But this tree was not a manuscript; it was the same living thing that in its youth had sheltered moose and caraboo, and might still guard the slumbers of bear, panther and deer. This tree was young, indeed, when savage men hacked down trees with stone axes upon the banks of the "river of the Mohigans," and the shores of the "Lac de Iroquois." It still bore the scars which the agents of the proud provincial governor had marked upon it. It was the corner which Claude Joseph Sauthier had shown upon his "Chorographical Map of the Province of New York." The breeze had whispered softly among its boughs during the horrors of the French and Indian war; it had bathed in the sunshine and calm of the wilderness during the long and fierce struggles of the revolution. Soldiers, statesmen and orators had passed away, but the grand old hemlock still remained full of vigorous, joyous life.

The tree is so thrifty, and by its location in a swamp is deemed so secure from any forest fire, that it will remain — if untouched by

the axe — intact for many years, a living monument. It is situated upon the State lands in the south part of sub-lot No. 15 in Great lot 4 of Palmer's purchase, and should be religiously guarded, not only as one of the most important land corners, but as an historical relic of surpassing interest. Its location is shown upon the accompanying map.

Time fails to give all the details of these interesting measurements. Let it suffice to say that the length of sub-lot 15 (south tier) was found by assistant Francisco to be 274 chains and 38 links. The length of lot 9 in the north tier was found to be 243 chains and 63 links. The width of great lot 4, including the H. T. P. lot, was found to be 335 chains and 20 links: The widths of these lots, as originally given in the deeds thereof (see, also, records of balloting, Field-book 16, Sub F., Secretary of State's office), were for lots 8 to 14, originally " $48.10\frac{4}{7}$ " chains, and no H. T. P. lot was made. This was changed by agreement of the proprietors to 44 chains and 58 links, and the H. T. P. lot was then created in order to conform the subdivision to what Lawrence Vrooman had shown upon his map, but had not located on the ground. The H. T. P. lot was intended by the original proprietors to have made, 24 chains and 64 links wide. The original allotments, 8 to 14 having a width of 48 chains and " $10\frac{7}{10}$ " links, were found by Mr. Francisco to have been actually run, and the old marked trees being cut into, and the annual rings of growth counted, proved to have an age of 94 or 95 years. Lawrence Vrooman's fieldnotes are dated October, 1788, and the identification of the line (both by the marks found and the documentary evidence) is complete. The second subdivision of the north part of Great lot 4 into eight lots, including H. T. P., as proposed by the proprietors, and as now held by owners under the old deeds, was never actually made and their theory was indeed impossible. The width of the north half of Great lot No. 4 is 335.20 chains. Lawrence Vrooman thought it was 336.74 chains, and after planning to divide it into seven lots, each " $48.10\frac{4}{7}$ " chains wide, (and thus really consuming the whole of the 336.74 chains), he proposed to put in narrow H. T. P. lot 24.64 chains wide. This is, of course impossible and absurd. In carrying out the present survey, Mr. Francisco and his assistants, although searching carefully and constantly, found no lines, except the ancient boundaries already described; the lines of the patent and of the lots, $48.10\frac{4}{7}$ chains wide which lot lines are now discarded under recent sales. These ancient lines were carefully remarked and the true distances between them determined.

Making the H. T. P. a proportional part of the subdivisions of Great lot 4, the true width of each of the said lots, 8, 9, 10, 11 and 12, was found to be 44 chains and 39 links; lots 13 and 14 were each 44 chains and 40 links in width; and the H. T. P. lot was found to have a width of 24 chains and 45 links.

The complication and difficulty was found to exist at the junction of the sub-lots 8, 9, 15 and 16. Here sub-lot 16 of the southern tier in Great lot 4 was found to have been run northward over the ancient centre line of the Great lot, by some parties unknown, so as to overlap upon the State lands in lot 9 a distance of 23 chains, thus abstracting over 100 acres from every sub-lot in the north tier of Great lot 4.

The original survey of these sub-lots by Lawrence Vrooman makes each of the lots in this north tier 235 chains and 43 links long. The overlap discovered, would reduce the length of these lots to 212 chains and 70 links, and increase the length of the lots in the south tier of Great lot 4 in the same proportion. By my direction, assistant Francisco searched for and found the south line of Great lot 4. He then measured the entire length of the Great lot on a magnetic bearing of N. $26^{\circ} 30'$ E.; which he found would best retrace the ancient line of marked trees; and found it to measure 518 chains and 1 link.

The length of Great lot 4 by the ancient survey was 516 chains. The lot was, therefore, found to be two chains longer by the new survey than was recorded by Vrooman upon his map. On this map the sub-lots in the north tier are recorded, as above mentioned, as being 235 chains and 43 links long. As the length of the Great lot is found to agree within 2 chains, there can be no foundation for the line which would reduce them to but 212 chains and 70 links.

The right of private parties to sub-allot their property may not be questioned; but the shifting of the subdivision line of the north and south tiers to what — if it is any thing — can be only considered a recent second sub-allotment line, cannot be made to affect whole lots owned by the State; nor can such second sub-line be extended across them, so as to cut off, reduce, govern or limit any portion of the property of the State, or of other lots whose owners do not accept such change.

CONCLUSIONS.

The original line survey seems to have been made with care and accuracy; little attention being given to the topography, as the work

was merely intended for the subdivision of property. The investigation shows:

(1.) That Great lot No. 4 was actually subdivided on the ground as shown by Vrooman on his map dated January 10th, 1789; the old marked trees being found, except that the H. T. P. lot was not made; the seven lots (8 to 14) extending over and covering the whole of the north part of Great lot No. 4.

(2.) That the original survey made the length of Great lot 4 in Palmer's purchase 516 chains.

(3.) That this Great lot was divided into north and south tiers; the lots in the north tier being, intended to be 235.43 chains long and in the south tier 280.57 chains long.

(4.) That the width of Great lot 4, by the old chain measurement was 336.74 chains.

FINDINGS.

The investigations and measurements disclose the following material facts:

I.

That the original north and south lines of Great lot No. 4 still exist marked upon the trees, and that the length of said Great lot, between said lines, is 518.01 chains.

II.

That the width of said Great lot 4 is 335.20 chains, including the sub-lot H. T. P.

III.

That, if the allotment as originally proposed be maintained, the width of the lots, in round numbers, will be between 44.39 chains and 44.40 chains. (To avoid carrying the widths to interminable decimals it is suggested that lots 8 to 12 each be made 44.39 chains wide; lots 13 and 14 each 44.40 chains wide,) and the lot H. T. P. will be 24.45 chains wide, and that each of these lots in the north tier, be 243.63 chains long.

IV.

That the lots in the south tier do *not* lap over upon those in the north tier 23 chains; but have a length of 274.38 chains.

SECTION VI.

TOTTEN AND CROSSFIELD'S PURCHASE

AND

MOOSE RIVER TRACTS

WEST CANADA LAKES.

Time is so limited that only the briefest statement can be given of the measurements made in this very interesting district.

Toward the middle of October it became evident, that the location of the boundaries of Township No. 3, of Totten and Crossfield's purchase, would be needed to perfect the maps to be made of the State lands therein, which amount to upwards of 20,000 acres. As the Adirondack winter sets in very early — snows beginning to fall in October even on the lowlands in the central portion of Hamilton county — the Superintendent directed Mr. Francisco, about the 20th of October, to defer the completion of work on the Palmer's purchase lines, and make an immediate survey of such portions of the lines of Township No. 3, as would serve to locate the south-westerly and north-westerly corners thereof. He was also instructed to connect certain points on the east line of township No. 8 of the Moose River tract, (located by Mr. Davis and party in 1882,) with definite points upon the shores of the West Canada lakes — which are immediately adjacent to the westward of the line in question. By this means, the line would be connected with the most prominent features of the topography of the country, and be easily discovered and retraced in the future.

The West Canada lakes are situated in the wild district, at the

head waters of the West Canada creek; which here has its source; and descends from an elevation of 2,348 feet, over many a rift and rapid, to the famous Trenton falls.

It was from the West Canada Lakes in July, 1882, that the failure of provisions had compelled us to return northward to our base of supplies. Nearly a dozen beautiful bodies of water, here cluster among the hills; the dense forest enclosing them on every side. Deer and trout are abundant. The bear is not infrequently met with, and the panther, in this vicinity, finds many a lonesome glade where he may roam undisturbed.

The surveys which I had made in 1882 had proved that these lakes were not located in Totten and Crossfield's purchase, as had been often supposed, but in the Moose river tract. It was proposed by the present survey, to connect these lakes by measured offsets with the boundaries retraced the preceding fall, and to connect the topographical work with the land lines.

On October 23d, assistant Francisco, with his party, set out for the West Canada's *via* the Cedar lakes, accompanied by a sufficient force of guides and packmen. Being heavily loaded with blankets, provisions and instruments, the party was compelled to go into camp the first night at Grass brook. October 25th the party reached the lakes, crossing the Cedars by the light boats of the guides. The West Canada's were reached in time to enable the party to plan the manner in which the lines should be measured, and the triangulation of the East lake made. "Ice formed rapidly on the inlet of the lake to-night, and the prospect of the closing of the lakes behind us, made us resolve to hasten work with all possible speed."

Friday morning, October 26th, showed the ground covered with snow. The snow continued to fall all day but, notwithstanding the disagreeable nature of the day, the measurements were at once commenced. The west line of township No. 3 was discovered, and bearing N. 27° W. and traced northward from a stream, which proved to be the inlet of the East lake. Five chains north of this inlet a balsam tree was marked, as the initial point (A) of the offset line to the lakes. The offset was found to pass over difficult ground, "for the most part through a thickly grown Alder swamp, which greatly impeded progress, as a line had to be cut all the way for accurate chaining." This line crossed the inlet of the lake five times. It was run on a bearing of S. 63° W. and reached the shore of the east lake, at station B, 65.57 chains from the initial point.

Here a base line was measured, and the length of the East lake found, by triangulation, to be 39.57 chains to station D, on the west shore, as shown on the map.

October 28th, starting from station D, the distance of the South Lake was determined in a similar manner; as shown on the accompanying map; and the local topography sketched.

October 29th the line to the Great or Middle West Canada Lake, was measured to, and the length of the lake found by triangulation, from a base measured at the east end. Station G, at the east end of the lake, was located on a huge rock, called by the guides the "Devil's Chair." The length of this lake is 55.04 chains. The water is deep and clear, and the shores rocky and picturesque. It is the only lake of the group which contains both lake and brook trout. The forest here is remarkably beautiful, the black spruce growing thriftily and but few dead trees to be seen.

The declination of the needle at the middle West Canada lake, I had determined on July 9th, 1882, at the station shown on the east shore on the map, and found it to be $9^{\circ} 54'.2$ West of true North. The ancient lines in this section show a change from the original bearing of about 3° of arc. This would make the magnetic declination at the time in which the Totten and Crossfield townships were laid out in the year 1772, about 7° West of true north.

October 30th work was resumed at the north-west end of the Middle lake, with the intention of running a line across the divide, between the waters of the West Canada and the Moose river, to the small pond known as Brook-trout lake. Here, the assistant was at a loss how to proceed, not knowing in what direction to run his line. Consulting his guide, Sturgess, he was shown a tall tree upon a distant mountain slope and advised to run the line upon that bearing, as that would bring him to the Brook-trout lake at the terminus of the trail near a little inlet on the east shore. The line was run in accordance with the advice of the guide, and struck the lake shore less than half a chain from the place desired. The marvelous knowledge of woodcraft which these men of the forest possess, could not be better shown than by this example; the guide did not know the bearing, nor did he know the distance, but he knew which way to go and how to get there.

It is needless to dwell upon the other measurements, the results of which are sufficiently shown upon the map of the West Canada lake region. The character of the country and lands in this section have been heretofore described. The topographical work was hast-

ened as soon as the connection of the lakes with the west line of township 3 had been made, for the snow was increasing in depth, and the lakes would soon close with ice. The location of the State lands in the western part of township No. 3, is shown upon the map. The boundaries of this township can never be lost hereafter, as reverse measurements from the lake shores will at any time redetermine them.

Township No. 3, is located on the western boundary of Totten and Crossfield's purchase six miles in an air line northward of Lake Pleasant. The outer bounds of the township were marked in 1772, by Archibald Campbell, who made the east and west bounds each 567 chains and 60 links in length (N. 30° W.) and the north and south bounds 418 chains (N. 60° E.)

The bearings of the lines were found to have changed since 1772, and were now N. 27° W. and N. 63° E. respectively. The annual change seems to have been less in this district than in the region to the southward in the vicinity of the settlements. This suggests the possibility that the clearing away of forests changes the location of the isogonic lines, which are probably dependent upon the lines of a mean terrestrial temperature. A further survey of this township is desirable, especially the location of the north line. Lumbering companies have now cut roads to the valuable pine and spruce forest in township No. 4, next adjacent on the north, and the location of the boundaries of the State lands should be made while the old timber remains uncut in order to avoid future vexatious complications.

No disputed or conflicting lines were found in this district. Some random lines, made by compass surveyors searching for the ancient boundaries exist, but were so recent as to cause no confusion. The work in this section was, therefore, simple, and was rapidly executed, and calls for no discussion.

The location of the large tracts owned by the State in the heart of Hamilton county had already been partially executed during the progress of the Adirondack Survey. Raquette lake and township No. 40, were reached in 1882, and the measurements then made have already been described and need not be repeated here. Indeed, time and means only permitted the settlement of those boundaries which were in dispute and required immediate survey.

SECTION VII.

ESSEX COUNTY.

OLD MILITARY TRACT; (SOUTH PART;) TOTTEN AND CROSSFIELD'S PURCHASE; (NORTH AND EAST BOUNDS;) ROARING BROOK TRACT, ETC.

The State lands in the County of Essex, preceding the tax sale of 1881, had an area of 133,447 acres. In 1881, additional lands to the extent of 25,690 acres, were acquired by the State; making the total area of public lands in this county, at the present time, 179,137 acres.

These lands are nearly all located in the wildest and most mountainous portion of the county, and in these remote sections are, generally, well timbered. The greater portion of the State lands, in the southern portion of the county, are located in townships 16, 26 and 27 of Totten and Crossfield's purchase. The location of the joint corners of Townships 16, 18, 26 and 27 and of 26, 27, 30 and 46, was made in 1880, and the discoveries then made and methods and results of work, have already been described in a former report to the Legislature.

Having studied the location of all the several tracts of State land in this county, I found that the localities, which now required most immediate attention, were in the central portion of the county, in North Elba, Keene and Elizabethtown. Here, the boundaries of the land patents were involved in obscurity, owing to the overlapping of one system of land surveys upon another.

The earliest land grants in this portion of the State, were the French Seignories. Vermont and northern New York were then, as far south as "Lac St. Sacrement," under the domination of the soldiery of Louis XV. Of all the grants made by the French Crown, the great Seignories of Hocquart and Alainville, can alone be definitely traced. With the conquest of Canada, the French grants were swept away and a new policy was inaugurated. A great num-

ber of the early English grants were made to officers and soldiers of the French and Indian war. Hardly had this been done when the Colony was in the midst of the convulsions of the Revolution; and it was not until peace had been secured and the State government established, that the boundaries of property in this region began to assume any fixed condition.

In the southern and western portion of the County of Essex, the outlines of a number of the townships of Totten and Crossfield's purchase, and adjacent tracts, had been marked by the Colonial surveyors. North of that purchase, within the territory conquered from the French, existed a great extent of forest land, lately the property of the northern or Algonquin Indian tribes, and in 1786, the State government sent its surveyors to run out the bounds of a tract proposed to be given to the revolutionary soldiers in compensation for their services.

Thus arose what is now known as the "Old Military tract," intended to contain some 640,000 acres, but actually reaching an area of upwards of three-quarters of a million of acres.

I have given, in a former report, a detailed account of the rediscovery and location of the south boundary of this great patent, and the work accomplished in this section, during 1883, can be sufficiently understood without again explaining the means by which the lines of the Old Military tract were rediscovered and their location ascertained.

It is only necessary in the present report to specify the particular tracts of State lands which were located by survey during the past season, and to give such explanation as will prevent any misunderstanding in the future.

It is therefore proper to state, without further explanation, that the Old Military tract was based upon a line run from a point in the town of Westport, near the shore of Lake Champlain, being a corner established by Zephiniah Platt in 1786; which was the initial point of the survey made by Cornelius Tappen in 1787.

Tappen measured from this corner a line due west as the magnetic needle pointed in that year; and, having run out a distance of ten miles, made a right angle and commenced to mark a line of trees for the east boundary of the Old Military tract. This line was extended to the frontier of Canada in latitude 45° north, and forms the eastern boundary of Township No. 5, in Clinton county, heretofore discussed.

The Old Military tract was subdivided into twelve townships; the two southernmost being townships No. 1 and No. 12.

It was in township No. 1 that the complication arose, which gave me so much difficulty in settling these boundaries in the spring of 1881. The monuments then set and lines established, greatly facilitated the present work.

Township No. 1 is the south-east corner of the Old Military tract, but no longer exists in its original and complete form.

In 1817, a new tract was laid out under the direction of the Surveyor-General, Simeon De Witt, and was intended to include the mountainous district along the boundary between Keene and Elizabethtown. This new subdivision was, for lack of any better name called the Roaring-brook tract, after the numerous swift mountain streams which descend noisily from this great mountain mass. Here rise the lofty peaks of the Giant mountain, Green mountain, Iron mountain, Bald mountain, and Round mountain, to heights of from 3,000 to 4,500 feet above the sea.

The survey of this so-called Roaring-brook tract was made by S. D. Kellogg, Deputy Surveyor on behalf of the State during the season of 1817, and extended northward from the North River Head tract, so as to include and cover a great portion of Township No. 1, in the Old Military tract. Thus two sets of lines, one superimposed upon and above the other came to exist, and confusion was created, which has lasted down to the present day.

In the very midst of this Roaring-brook tract, the State owns twenty-seven large lots of forest land; and report was made to me that trespasses had been committed upon other State lands to the westward on the Old Military tract; all being in the vicinity of Keene Valley, now one of the greatest summer resorts in the Adirondack region.

An examination of the original maps of the allotment of the Roaring brook tract, showed that the numbering of the lots was different from that shown upon Burr's official map — the State assessment atlas — and it was found that neither the Comptroller nor the State Engineer and Surveyor, had any records which would show the true location of these lots, with regard to the topography.

It was important to ascertain how near the settlements of Keene these lands were actually located, and to mark their boundaries and ascertain whether trespasses had actually been committed and valuable timber removed. I, therefore, directed Mr. G. L. Locke, who had been for many years engaged in retracing ancient boundary lines in the forests of Essex county, to proceed to Keene valley and take up the resurvey of the lands in question.

The numerous signal stations located in this section by the Adirondack Survey, now proved of the greatest value. The State lands being in detached parcels, each group of lots could be surveyed separately, and located by measurements made to the nearest signal station; then, as the distances and true azimuths from signal to signal were known, the true geographical positions of the several tracts of State land were immediately obtained, without incurring the enormous labor and expense of detailed measurements, extending lot by lot through all the intervening private lands. The connection of the allotments with the signal stations, by triangulation, was intrusted to assistant Blake, whose acquaintance with the locality and the position of the signals, made him especially available in this department.

The field work in this district was taken up early in July, and was continued until the twelfth of October, when the complications affecting the boundaries of the State lands had been cleared away and monuments set at the important corners. Mr. Blake remained until the middle of November upon the summits of the high peaks, perfecting the connection of the detached tracts by triangulation.

The lots located in the Roaring-brook tract were 28, 29, 30, 38, 39, 41, 42, 48, 50, 51, 57, 58, 59, 65 and 66 of State lands. In searching out the outlines of these lots the boundaries of the following private lots were also located, viz. : 37, 40, 49, 52, 60, 61, 67, 69 and

The position of these lots and the location of the corners and monuments are given upon the accompanying maps.

The signal stations on the Giant mountain, and Hopkin's peaks, were measured to from the lines of the lots, and the connection of the State lands with the triangulation of the interior thus secured. The returns of these measurements have only recently been made. They will be reduced at an early day, and the geographical positions of each of the several lots or tracts of State land, and of the corners thereof, will be computed and transmitted in a future report.

Upon the completion of work in the Roaring-brook tract, the location of the State lands to the westward in the Old Military tract, was taken up. Surveys were made of lots 65, 69 and 93 in Township No. 1, and the trespasses which had been reported to me were found on lot 93.

Lot 93 is located on a branch of John's brook not far from the settlement of Keene Valley. Timber had been methodically cut on a section in the north part of this lot and removed to the settlement for sale. This trespass, as soon as located, was reported to the Comptroller.

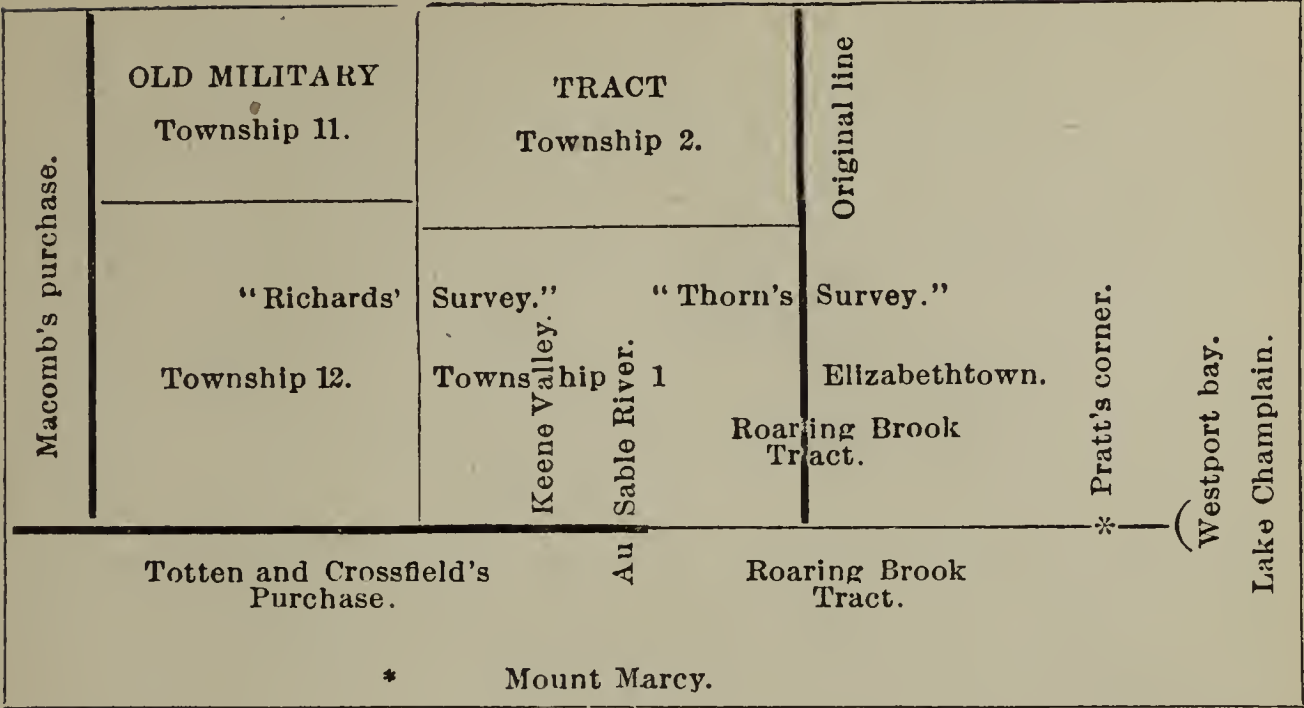
The time at my disposal, within which this report must be rendered, will not admit of entering into the details of these measurements. Upon the completion of the survey and location of the State lands in Township No. 1, the measurements were extended westward along the north line of Totten and Crossfield's purchase. This line is here, also, the south line of the Old Military tract, and upon it as a base the location of the public lands in Township No. 12 (O. M. T.) was begun. The line thus run determines the southeast corner of Township No. 12, and the south line of the State lots 4 and 5 in Township 12, (O. M. T.) The line was carefully measured across Keene Valley, over the Wolf-Jaw range, across the head of John's brook valley, and thence westward over the high ridges near Table-top mountain and Mt. Phelps, terminating near the trail from Mt. Marcy northward to Clear pond. The old lines of marked trees were carefully traced in every instance, and the corners set only at the intersection of original lines.

The variation of the needle upon the old subdivision or allotment lines in the Roaring-brook tract, was found to be $3^{\circ} 30'$ to the westward, since 1817, or $210'$ of arc in the interval of 66 years. This would indicate a mean annual change in the declination of $3'.18$ to the west, for this section of the Adirondack region.

The declination of the needle was observed on the meridian line, determined at Keene Valley, and was found to be $11^{\circ} 32'.6$ west of true north on August 1st, 1883. Using the observations on the meridian line of Keene Valley as the standard for comparison with the lines of the adjacent tracts, it is apparent that in 1817, the magnetic declination was 8° west of true north.

While this is true for localities adjacent eastward of the meridian line, the variation on lines to the westward is found to be slightly different, and is computed at $3'.85$ per year since 1813, which is the date of the allotment by John Richards of Townships No. 1 and No. 2. The north and south lines of these lots had a magnetic bearing in 1813, of North $0^{\circ} 30'$ West. They have now a bearing of North $4^{\circ} 00'$ East, showing a change in 70 years of $270'$ and $\frac{270'}{70} = 3'.85$, the apparent average rate of annual change along the lines of the townships referred to.

Time does not admit of a more extended discussion of work in this section. The results are shown more particularly upon the maps of the lots and lines surveyed, hereto attached. The accompanying diagram shows the manner in which the ancient surveys are superimposed.



Had it not been for the thorough examination given this section in former years by the Adirondack Survey, the location of these State lands would have been extremely difficult. The surveyors sent into this section, through their previous experience with me in searching out the adjacent lines, were able to take up the work intelligently and promptly.

The location and character of the State lands in the County of Essex can be better understood from the accompanying illustrations (see crayon drawings,) than from a technical description, lot by lot. The view from Mt. Hurricane, shows the entire mountainous region from the eastern slopes of the Giant mountain range to Whiteface mountain. It gives the location of Iron mountain, Green mountain, Mt. Moriah, Giant mountain, Knoblock mountain, Pitchoff mountain, MaComb's mountain, Mt. Dix, Hunter's pass, Nipple Top, Dial mountain, Elk pass, AuSable pass, Sawtooth mountain and all the mass of the Gothic mountains with Basin mountain, Mt. Haystack and Mt. Tahawus towering above all.

Below is shown the location of the pleasant and sheltered valley of Keene, and around to the westward, against the horizon, Mt. Colden and the MacIntyre range, with great Slide mountain, Mt. Porter, Sable mountain, Long Pond mountain, Keene mountain, MacKenzie mountain and Whiteface complete the picture.

The toils experienced by the survey parties in climbing from range to range, cannot be understood or conceived even by an inspection of these drawings. The tangled mass of fallen timber in the forests; the ledges to be climbed; the cold wet moss; the frequent storms and exposure must be felt to be understood.

SECTION VIII.

FRANKLIN COUNTY.

MACOMB'S PURCHASE AND THE NORTH WEST BOUNDARY OF THE OLD MILITARY TRACT.

The State lands in the county of Franklin have an area of 160,121 acres. The greater portion of these lands lie to the southward of the north line of the town of Duane, and are consequently within the limits of the area included by the lines between the trigonometrical stations of the Adirondack Survey from Owl-crest, De Bar mountain and Mt. Azure on the north ; St. Regis mountain and Mt. Amper-sand in the central portion of the county, and signal stations on Mt. Morris and Mt. Seward in the southern part of the county. The boundaries had been, therefore, already sufficiently determined to enable me to prepare a land map of the county, showing the location of the tracts owned by the State. The details of topography, over a large portion of the wilderness, in this section will, nevertheless, require years of hard, conscientious labor, if worked out with exactness. This district contains a multitude of small lakes which cannot be located by triangulation.

The minutia which tourists, fishermen, sportsmen and travelers who now throng the wilderness in summer desire upon the maps, would require the work of hundreds of survey parties if every stream, rill, runway or undulating ridge or marsh or pond be located throughout these thousands of square miles of forest. Our work has been confined to the more important lines, and the present survey of the State lands has called for the location of boundaries in the first instance, and renders the sketching of the topography and the location and mapping of lakes, ponds and swamps, necessarily, a secondary matter.

The investigation of the condition of the boundaries of tracts owned by the State, in Franklin County showed me, that the peculiar complications which existed in the counties of Fulton, Hamilton and Herkimer, did not exist in this district.

It is creditable to the backwoods inhabitants, of this county, also, that no such system of timber depredation exists as was reported to me from the previously mentioned counties.

The principal cases which require attention in this county are the lands in which the State holds an undivided interest, acquired by tax sales.

The private owners — partners with the State — in such cases, at times experience great hardships. They have no right to cut the timber, as the amount of their particular interest has not been determined, nor can it be, without a decision of the courts or a partition sale.

The act of 1883, gave me no power to separate by survey or to make partition of tracts where the State owned an undivided interest with private parties. Many of these cases are quite complicated and deserve the early attention of the Attorney General.

When explicit decisions have been rendered in such cases by the Courts and partitions properly directed, the work of surveying and separation can be taken up and properly done. Until these necessary legal steps have been taken, the location or subdivision and separation of such lands by survey, is premature and improper and, indeed, impossible.

The original surveys in the County of Franklin, although made with magnetic compass, were so well systematised that such complications as have occurred in the other counties are not likely to occur here, to any such extent as was encountered on the Jerseyfield and Palmer lines.

From the time of the original survey of Ma Comb's purchase, the variation of the needle was to some extent, attended to, as the surveys lasted over a period of many years. Being made for wealthy private citizens, political changes did not affect or disarrange the work, and the measurements have consequently a unity rarely found in compass surveys of such vast area.

Some misapprehensions, however, existed at the time in regard to the nature and extent of the movement of the magnetic needle. In great tracts 4, 5, and 6, the year 1797 was assumed to be the year of no variation for that entire area. This, I have heretofore shown did not apply to some stations in the interior of the wilderness;

lines of marked trees run in that year in several sections, by different surveyors with different instruments when traced and referred to the meridian lines which I have established in each of the northern counties, showed that in that year the declination of the needle was often from 3° to 4° to the westward of true north.

This is one source of error which has to be guarded against in the 4,000,000 of acres of the Ma Comb's purchase. I should have been glad to have extended the detailed investigation of the lines of each of the several lots of State land in this county, but the peculiar condition of the "undivided" tracts and the limited time and means, compelled me to confine my attention to a few localities.

The observations made by myself personally have been already sufficiently outlined in the narrative of work between St. Regis, Mt. Azure, the St. Regis waters and Chateaugay. During the reconnaissance made between St. Regis and the head waters of the north branch of the Saranac, I learned that lumbering operations were about to be commenced upon a large scale in the south part of Township No. 15, immediately adjacent to valuable pine and spruce forest owned by the State in Township No. 18 of Great tract No. 1.

The boundary line between these townships had not been authoritatively marked since the original survey in 1799. Ascertaining that the uncertainty of the location of this line might lead to trouble I gave directions for its retracing and the permanent marking of the corners. This work was done by a party under the supervision of Mr. S. Wardner, a local surveyor, who identified the line and witnessed the monumenting of the corners of the townships.

The magnetic bearing of the line was found to have changed $3^{\circ}15'$ from the original recorded direction of due east and west in 1799, being now S. $86^{\circ}45'$ E. The width of the township was found to be 1 chain and 65 links less than by the original measurements.

The north-west corner of Township 18 was marked with a substantial block of granite of 500 lbs. weight, with drill hole to receive the copper bolt marking the centre of the station.

At numerous places along this line, forest fires had destroyed the woods and made the retracing of the line difficult. The line was found to cross the east branch of St. Regis river (the outlet of Osgood pond), 104 chains and 50 links, east from the north-west corner of township No. 18. Hay's brook was reached at 191 chains from the corner. The north fork; the Osgood stream; which descends from the pass at the eastern end of the sable, spruce clad

mountains intervening between Rainbow Lake and Meacham; was reached at 478 chains. At 650 chains the reference monument was set on the west line of Township 10 of the Old military Tract for the corner of Townships 15 and 18 of Great tract No. 1 in Ma-Comb's purchase.

Much valuable pine timber exists upon the State lands in this section, and has the greater value on account of its accessibility. Lakes and rivers combine to make the removal of timber easy and these natural conveniences increase the market value of the timber.

An account of the survey and monumenting of a section of the east line of the County of Franklin, during the past season has already been given. It furnishes, by transit line, the exact location of the east boundary of Township No. 8 in the Old Military Tract and much valuable topographical data; and, by its connection with the triangulation, gives the geographical position of the County line and affords a base for the accurate mapping of the adjacent tracts. The general bearing of this line was South five degrees West.

The change in the general direction of the line since 1787, was found to be about 300' of arc west.

The declination of the needle in townships 8 and 9 is too much affected by local attraction from magnetic iron ore to be regarded as indicating the normal declination for that latitude and longitude. In order to plat the maps of the State lands in the remainder of the county accurately, I determined the direction of the true meridian at a number of stations, and, from magnetic observations subsequently made, obtained the declination of the needle for each locality.

At the signal station of the Adirondack Survey at Malone the declination was found to be $12^{\circ} 30'$ West of true North.

At the mouth of the St. Regis river on the Indian reservation it was found to be $10^{\circ} 31'.2$ West of true North.

At Paul Smith's on the St. Regis Lakes it was $10^{\circ} 09'$ west, and at the head of the Saranac Lakes four observations gave a declination of $10^{\circ} 47'$ west.

Assuming a variation in the present bearing of lines in the central portion of the county since the time of original survey of $3^{\circ} 15'$, the declination of the needle in 1799 at these stations was nearly as follows:

Malone	Variation, 1799 = $9^{\circ} 15'$ West
Indian Reservation.....	" " = $7^{\circ} 16'$ "
St. Regis Lake.....	" " = $6^{\circ} 54'$ "
Saranac Lakes.....	" " = $7^{\circ} 32'$ "

These are interesting figures in view of the fact that they give the approximate declination at about the time when the gradual eastward movement of the needle was near its periodical minima.

It is evident that the popular idea existing, that the early surveyors found the needle to point nearly along the true meridian in 1797, everywhere throughout the heart of this region, was a mistake.

Late in the season I was desired by the Comptroller to cause a detailed survey to be made of a large number of lots in this county. The limited extent of the appropriation, and the care and time which the investigations already undertaken required, prevented these special surveys from being taken up at this time.

SECTION IX.

ST. LAWRENCE COUNTY.

MACOMB'S PURCHASE; TOWNSHIPS OF GRANSHUE,
HOLLYWOOD, KILDARE, OAKHAM, SHERWOOD
AND EMILYVILLE.

Although the County of St. Lawrence is, to a great extent, densely wooded, and includes within its borders nearly a thousand square miles of wild forest; yet its inhabitants have thriftily managed their property, and but small portions of the original purchase by MaComb, have ever returned to the State for the non-payment of taxes.

The total area owned by the State in this county is 43,241 acres, nearly all well timbered land.

The greater portion of these lands are in townships Nos. 1, 2, 4, 5, 7, 8 and 9 in Great Tract No. 2; and in Township 15 in Great tract No. 3 of MaComb's purchase.

The largest separate tracts of these lands are in the townships of Granshue, between the Raquette and the Grasse rivers, and the township of Emilyville on the head waters of the Oswegatchie river. These two detached portions of State lands are nine miles distant from each other. Emilyville or Township No. 15 is so far distant in the wilderness as to be for the present, perhaps, secure from depredators; although little, if any, plundering of State timber has been done in the county of St. Lawrence.

Early in the season, I made inquiry and investigation in regard to the condition of these tracts of forest land, and ascertained that they were valuable. In looking over the data to ascertain what measurements would be needed to enable me to locate these tracts accurately upon the maps, I found that, if the principal lines and

corners of the townships of Granshue and Emilyville could be connected with the triangulation, the drawing of the outlines and allotments of the remaining townships could be truly made.

A reconnoitering party was sent to the head waters of the Oswegatchie river to examine the mountain summits southward of Great Cranberry lake, between the great inlet and the head of Bog river. This reconnoissance was made during July; and on the 30th of that month report was made to me that the mountain summits which I had noticed in this district in 1873, (and which I had now caused to be re-examined) were available as stations in the chain of triangulation to the limits of Township 15 (Emilyville). Yet, while available, the forest on these summits was found so dense that stations could only be made by heavy chopping. The mountains in this section are low, and the trees usually large and thrifty spruce.

The expense and delay of work consequent upon such clearings, and the number of signal stations that would be required, brought me, reluctantly, to the conclusion, that our labors in St. Lawrence county, during the present season, must be limited to the central and eastern sections. These tracts being near the signal stations on the Raquette river of the Adirondack Survey could be located without the expense of new clearings and new stations. Limited time and means rendered this alike indispensable.

The south-east corner of the township of Granshue (T. No. 7, Gt. Tract 2), was, therefore, selected as the initial point of the present surveys in the County of St. Lawrence.

Assistant Farnsworth, who had so well conducted the survey of the Raquette river in 1879, was otherwise engaged, and I placed his assistant, Mr. S. B. Crandall, in charge of the measurements along the boundaries of Granshue. Mr. Crandall having charge of the Surveys of the West Virginia Land Company was absent from the State, and I was not able to secure his services before the middle of August. His long acquaintance with the boundaries of the MacComb townships, in this county, and his experience upon the Adirondack survey, made him specially available in this department.

On Saturday, August 18th, I placed the plan of work in Mr. Crandall's hands at Potsdam, and on the 20th he had organized his party, and was upon his way up the Raquette river.

The examination which I had heretofore made of this section from Mt. Morris, in 1882, and from Bog Mountain during the present season, had shown me that the boundaries and corners of the lands in this vicinity, could be best connected with the surveys of the interior by

measurements to and from this signal station on Bog Mountain; which being visible from the signal station on Mt. Morris and Mt. Azure, would give the geographical position of all of the tracts that could be tied to it, by measurements with steel ribbon, along true azimuths.

Bog Mountain signal station was, therefore, made the central point of reference, and assistant Crandall was directed to first search out and locate, the south-east corner of the township of Granshue; to which he had been on former surveys; and then to retrace the east line of that township to the northward, measuring until he should reach a point on the line, due west from the signal on Bog Mountain. This accomplished, he was directed to proceed to Bog Mountain, and commencing at the signal station, run a transit line westward, on an azimuth at right angles with the township line, until it should intersect that line. The distances and azimuths thus found would determine the true position of the townships and the State lands therein.

On August 21st, the survey party reached the initial point at the south-east corner of Granshue. The provisions had been brought in and, by afternoon, the south and east lines of the township had been traced to their intersection, and a block of native granite, weighing upwards of five hundred pounds, had been placed at the corner, monumenting the converging lines of Granshue, Hollywood, Harewood and Jamestown. Camp was made near the shores of the beautiful little lake known as Clear pond, and before dark the store of provisions was augmented by a fine buck, shot by Mr. Crandall with his rifle, the only piece of venison enjoyed by any of the survey parties during this season.

Between August 22d and 25th, the survey party was busied in identifying, tracing out and clearing the brush from the boundary line between Granshue and Hollywood, preparatory to the transit work.

On the 25th, in accordance with instructions received from the Superintendent, search was made for a mountain thought to be in this vicinity, and on which a signal station was to be placed. This summit, had been swept clear of forest by a hurricane which had cut down the forest trees like a swath of grain, in a long, narrow band, for a distance of over seven miles. Sweeping across this mountain crest it had left the rock of the summit bare, and it was this naked rocky crest, which the Superintendent had observed from his station amidst the ice and snow, on the summit of Mount Morris in December, 1882. This naked crest the guides had called Bald Hill.

The singular freak of the tempest, which has swept the summit of this mountain clear of timber, is difficult to understand. So dense and unbroken was the wilderness, that no sight for some time could be had of this mountain, or of the wind-thrown forest, and in the effort to discover the summit two of the party were lost, and only found by the guides after hours of search.

From the summit of Bald Hill, a wild forest landscape was visible. Three miles to the south-west is Blue pond, a beautiful little sheet, shut in by the forest. Eastward Bog Mountain signal was visible, and further eastward Mt. Morris, Mt. Seward and all the high peaks of the Adirondacks were seen. Near by to the south-westward a deep gap in the forest stretched, from the mountain side away, almost as far as the eye could reach. This was what is known as the little wind-fall, and there the deep gash cut by the hurricane extended like a giant's highway through the forest. The terrible force which this tornado possessed since it swept to the earth in a few moments myriads of gigantic trees is difficult to estimate.

August 26th, assistant Crandall returned to the monument set at the south-east corner of the township of Granshue, and commenced the transit line northward. One of the men, Mr. Barkley, fell this day upon an axe and cut himself severely. Made seven transit stations and measured 993 feet of line. On the 27th, eleven transit stations were occupied and $3,978\frac{30}{100}$ feet of additional base line measured.

"August 28th, Barkley's leg was found to be in a dangerous condition, and he was sent out of the woods while yet able to move. Ran the transit line eighteen stations northward, and measured $5,028\frac{57}{100}$ feet of base line.

"August 29th opened with rain and work could not be taken up before 10:30 A. M. By working until dark, we made fifteen stations, and measured $3,755\frac{04}{100}$ feet of base line having now run $13,754\frac{91}{100}$ feet north from the Granshue corner monument. Set stone monument to-day at the south-west corner of section 36, in Hollywood. The line is now shut in by State land on both sides.

"August 30th ran $3,188\frac{74}{100}$ feet, and occupied seventeen transit stations. Station No. 55, was at the north-east corner of the State land in the Township of Granshue. Here, a stone monument was placed, the centre of the station being marked by a drill hole in the rock. At station No. 70 the north-west corner of section 36, State land in Hollywood was reached, and was also marked by a stone monument."

Not being sure where the offset line from Bog Mountain would intersect the township line, assistant Crandall now broke camp and moved to the foot of the Bog, and occupied the signal station on the mountain summit.

On Saturday, September 1st, the offset line from the signal, west towards the township line, was commenced, on an azimuth of $88^{\circ} 43' 45''$. The measurements had to be made down the steep mountain sides, where the greatest care was needed to secure exact allignment, and horizontal measurements with the steel ribbon. Only three stations were made this day, on account of the difficult nature of the ground. September 2d was Sunday, and rained nearly all day. On the 3d work was resumed on the transit line, the force now reduced to five men, but were able to make thirteen stations, and measure 4,100 feet of line, over rough ground. "Sent out for two more men to act as pioneers to clear the line, so that we may push the work forward as rapidly as possible, in accordance with the urgent desire of the Superintendent and my own duties in Virginia."

September 4th ran $7,890\frac{53}{100}$ feet of transit line and occupied thirty stations. Ground very rough, and bark slash, lumber slash and swamp. On the 5th nine stations were occupied and $3,064\frac{59}{100}$ feet of line run and intersection made with the township line, marked with a stone monument with drill hole centre. Another man injured to-day; Rodwell, badly cut in the foot by a miss stroke with an axe and had to be sent out to the settlements. Moved camp to southward on the township line to the north branch of Grasse river. Deer seem to be abundant and signs of bear are not infrequent. Wolves are reported to have been seen recently near this locality.

Assistant Crandall now returned to the monument set at the north-west corner of section No. 36 of Hollywood and by hard work twenty-nine stations were completed this day, and $5,279\frac{51}{100}$ feet of base-line measured. The line here runs over the west shoulder of Bald Hill, and across the "little windfall," which was found "extremely rough for measuring, and a bad place to run a line." At station 88, which is $20,916\frac{67}{100}$ feet north of the initial monument, the signal on Bald Hill was passed.

On September 7th, work was resumed at station 93, and $5,460\frac{15}{100}$ feet of base-line measured, twenty-two stations being occupied with the transit. At station No. 105, the north branch of the Grasse river was reached and located, and $26,847\frac{68}{100}$ feet north from the south-west corner of Hollywood, closed for the day near

the top of a hard wood ridge called Brunner Hill the next hill north of Bald Hill.

September 8th resumed work at station No. 115 and ran $4,973\frac{16}{100}$ feet, and occupied sixteen stations. Several important sub-corners of sections were located this day, and at evening, the line reached the stone monument at the terminus of the transit offset-line from Bog Mountain; being at a distance of $32,990\frac{31}{100}$ feet from the initial monument at the south-east corner of the Township of Granshue.

Thus the boundaries, location and connection of the State lands in this section had been made, and the measurements carried out connecting the same with the surveys of the interior.

The 9th of September was severe and stormy. Rain fell heavily during the night, and it was also very cold. Having gone into the field very lightly equipped the party was without tents and the journal of the assistant states: "camp without any thing but a camp fire is cheerless in such weather."

Nevertheless work was resumed at once. Returning along the line, the transit was set up at station No. 88, and a traverse line was run eastward to Bald Hill. Here, the signal station was now completed, and centred over the last station on the traverse, and observations taken to such signals as could be seen.

Thus the lines were connected with another station and the orienting and platting of the results of the survey upon maps made easy and accurate.

This completed the field work in this section for the season. Mr. Crandall's private survey work in Virginia did not admit of his taking up any additional section, and the lateness of the season and limited means, did not authorize me to organize a new survey party for this district.

On September 11th, Mr. Crandall rendered his report and completed his accounts and departed for the South.

The work thus done, in the County of St. Lawrence, affords not only the technical information required, but adds some important facts to our stock of information in regard to terrestrial magnetism.

The boundaries of the townships of Granshue and Hollywood, had been run in the year 1800, on magnetic north and south and east and west lines. The observed bearing of these lines during the present remeasurements showed a change of $4^{\circ} 43'$ to the westward in eighty-three years. The declination of the needle, as observed on Bog Mountain August 23d, 1883, was $5^{\circ} 59.2'$ west of true north. There is great local attraction of the needle in this vicinity, and all azimuths are based upon the meridian line here determined.

The declination of the needle in 1883 being..... $5^{\circ}59'.2$ West, and the change in the average magnetic bearing of the lines retraced being (since the year 1880).... $4^{\circ}43'.0$ West, shows a difference of $1^{\circ}16'.2$ West, which was the declination of the needle in the year 1800 at this station.

This is an important discovery; for it shows that, at the time when Medad Mitchell first traced out the boundaries of MaComb's purchase, the idea which was then entertained, that the magnetic needle pointed along, or nearly along, the meridian, was not without foundation in this part of the great patent.

Indeed, so irregular is the needle in its pointings in this vicinity, that there is every evidence that stations may be found, in the immediate neighborhood of Bog Mountain, where the marked lines will show that the compass pointed along the true meridian at the time of the original survey.

It is deeply interesting, to any student of terrestrial physics, to discover, within the limited area of one of the great land patents of New York, such diverse conditions in the magnetic constants, far back at a period when man's innovations had not been made, before the forest had heard even the distant echo of the lumberman's axe, or the solid rock had been blasted asunder for its wealth of iron. It would be interesting to extend this study so as to ascertain whether the changes in the location of the lines of magnetic force are in any way dependent upon changes in the mean atmospheric temperature or moisture.

The most important fact disclosed is, that, although in this locality the declination of the needle is generally several degrees less than the average in the southern and eastern portion of the Adirondack region, yet the *change* in declination, during the last century, has been almost the same here as in the other sections, where the westerly declination is, and has always been greater.

The time at my disposal will not admit of further discussion of this very interesting subject.

The measurements by which the State lands were located in this section and connected with the trigonometrical stations of the Adirondack Survey, have been sufficiently explained. The maps, accompanying this report, will show the position of the lots and the survey lines and the location of the monuments marking the corners.

Much valuable work could be done in the County of St. Lawrence were adequate means afforded. As it is, the orientation of a most important system of lines has been accomplished, and the data needed for the preparation of the maps of the State lands here has been secured.

SECTION X.

WARREN COUNTY.

STATE LANDS AT LAKE GEORGE, ETC.

The lands owned by the State in the County of Warren are — with the exception of the islands in Lake George — of small area and of less value than those which have been heretofore described.

The surveys, made by my direction, of the Upper Hudson and the Schroon rivers — the former in 1879 and the latter in 1880 and 1882 — together with the points determined by triangulation of the Adirondack Survey, gave many of the essential features of the county needed in mapping the lands. The location of the southwest corner of the county has been given in the section relating to Palmer's purchase.

The total area of State lands in the County of Warren is 30,683 acres. Very small areas, if any, of real and entirely untouched primeval forest, now remain within the limits of the county. The streams being nearly all suitable for log-driving, this county was, at an early date, stripped of its best pine; and the choice spruce and hemlock have now followed, to a great extent, the first mentioned and more valuable evergreen.

Within the limits of this county is the town of Glens Falls, where the entire volume of the Hudson river has been made available by nature for the use of the busy saw-mills, which have reduced so great a portion of the forest into valuable lumber.

Yet while the facilities for transportation, for milling and for market, have so greatly reduced the extent of the original growth of the evergreen forests in the County of Warren, it must not be supposed that the deciduous trees have been equally cut away. The red beech, the gigantic yellow birch, maples of many kinds, and

elms and other "hard-wood" forest trees, still cover vast extents of country, sheltering or hiding some groups of cedar, spruce and other evergreens, and the young second-growth pines.

Early in August I sent an agent to make inquiry as to the condition and value of the State lands in this county. He was also instructed to ascertain whether any questions had arisen as to the lots owned by the State. No special complications in regard to boundaries were reported. The value of a large number of the State lots — mostly covered with hardwood, balsam and other timber, not commercially esteemed — was obtained by careful inquiry and found to range from \$1.00 to \$1.50 to \$2.00 per acre.

In preparing the map of the allotments, which show the State lands in this county, I had found the old compass bearings to indicate the presence of magnetic iron in the country rock at some places. To obtain accurate data for the present map work, I, therefore, had the declination of the needle observed, at thirteen different stations in the towns of Stony Creek, Thurman, Johnsburgh, Chester, Horicon, Warrensburgh and Luzerne. The time at my disposal does not admit of my discussing the results of these observations. The observations were carefully and well made by Mr. N. L. Rush, who was detailed for that purpose, and will be found in the appendix on the Variation of the Needle (Magnetic Declination) at the rear of this report. At all of the stations occupied, the needle was found to point to the westward of true north. The minimum was $9^{\circ} 46'$ west and the maximum $13^{\circ} 10'$ west.

Early in the spring of 1883, I was requested by the Senate Committee on State lands to furnish information relative to the number and location of the Islands in Lake George, the greater part of which are owned by the State and are very valuable. In accordance with their request, I, therefore, caused investigations to be made, and soon ascertained that the location of the islands could only be secured by special survey. I had long before proposed to connect the shores of Lake George at several points with the triangulation of the Adirondack Survey. In 1881, I had established a number of trigonometrical stations on the adjacent Adirondack spurs, with a view to obtain bisections on points on the shores of this lake, so that its geographical position might be determined. Much valuable data was then obtained; but the location of each of the islands, and the precise survey of the shore line of the lake, were found to involve a greater outlay of time and means than could be afforded.

The reconnaissance made in 1881 developed the fact, that the

tertiary triangulation, which would be needed to locate the shore line of the lake itself, would be difficult at several points, on account of the irregular clusters of islands impeding sight lines. If the lines were shortened the triangles would become ludicrously small, — if any attempt were made to locate the islands — and such small triangle sides would not properly answer as new bases for the larger lake triangles across wide water to the next cluster of isles.

To simplify the work and to avoid needless complications in the measurements and computations, I resolved to have the survey for the location of the shore line and islands, made while the lake was closed by ice. By means of base-lines, carefully measured upon the ice, the tertiary triangulation could be checked and verified; while, from the termini of such base-lines, single reference lines could be measured through each group or cluster of islands, and offsets measured to right and left from such reference lines would determine the location and distance of the ends and shores of islands, points of promontories, depths of bays and all necessary details.

In accordance with this plan, I directed assistant D. M. Arnold, civil engineer of Ticonderoga, who was familiar with all the localities along Lake George, to take charge of a survey party, and furnished him with a diagram showing where the necessary base-lines and offsets were to be measured. He was provided with two standard graduated steel ribbons with spring balance handles and thermometers, and was directed to align personally the steel ribbon during measurement by transit; the "chain work" being intrusted to Surveyor G. L. Locke and one assistant. This work was executed during March and April, 1883, the ice being perfectly smooth and in fine condition for measurement.

Commencing at the signal station of the Adirondack Survey at Caldwell, on the grounds of the Fort William Henry Hotel, base-lines for the use and verification of lake work were accordingly measured and remeasured at every important point.

Between the signal station at Caldwell and the signal station at Rogers Rock fourteen of these base-lines were measured upon the frozen surface of the lake, and the termini substantially marked with nickel plated copper bolts set in the rock.

The means at my command were so limited that this work had to be discontinued upon the completion of these lines.

The data immediately needed was, however, secured, and much important information in regard to the islands in the lake, which is herewith transmitted.

The following is a list of the islands in Lake George owned by the State and of adjacent islands owned by private parties.

All of these islands excepting Willow Island and Prisoner's Island and one or two small islands near the outlet of the lake are in the County of Warren.

I regret that the time at my disposal does not admit of my entering into a more extended account of these beautiful islands ; which are, undoubtedly, among the choicest possessions of the State.

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LIST OF ISLANDS IN LAKE GEORGE.

NAME OF ISLAND.	Town.	Remarks.
A.		
Agnes Islands (with small isles).....	Hague.....	Opposite Sabbath Day Point.
"As you are" Island.....	Bolton.....	Owned by the State. (In narrows near west shore.)
B.		
Baby Island.....	Bolton	Near 14-mile Island.
Belview Island	Bolton.....	West of Dome Island.
Big Burnt Island	Bolton.. ..	Owned by the State. (In narrows, middle lake.)
Black Rock Island.....	Bolton.....	North of Little Harbor Island.
Burgess Islands (another near).....	Hague.....	South of Hulett's Landing.
C.		
Canoe Island	Caldwell	Canoe Club. (Caldwell.)
Clay Island .....	.....	Owned by G. W. Clow, White Plains, N. Y.
Cotton Island.....	Bolton.. ..	Hulett's Landing. In from of Cook residence.
Cook's Island	Hague.....	Owned by heirs of William Smith. (Near Green Island, 1 mile S. W. Tongue.)
Crown Island.....	Bolton.....	
D.		
Diamond Island.....	Caldwell	Sold to Ashmead.
Dollar Islands.....	Bolton.....	Owned by the State. (West shore north of French point.)
Dome Island.....	Bolton.....	Owned by heirs of Wm. Smith. (Sold) S. E. of Bolton.
Duke's Island.....	Caldwell	East S. and Diamond Island.
E.		
Elizabeth Island.....	Bolton.....	Owned by the State. (In Kaatskill bay.)
F.		
Floating Battery Islands (1 large and 11 small isles)	Bolton.....	Owned by the State. (The group is located south of the "Mother Bunch" on [the east shore of the lake.]
Flora Island (and two small islands).....	Bolton	Owned by heirs of William Smith.
Fork Island (and two small rocky isles).....	Bolton.. ..	Owned by the State (North of Big Burnt in the Narrows.)
Fourteen-mile Island.....	Bolton.....	Owned by heirs of William Smith.
G.		
Gem Island	Bolton.....	Owned by the State. (Occupied by a club.)
Gillette Islands.....	Hague. ..	Near Meadow point.
Glen Island	Bolton.....	Owned by the State.
Gourd Island	Bolton.....	North of the Coup, West of Big Burnt Island.
Grass Rock	Bolton.....	
Gravelly Island ; and three isles north.....	Bolton.....	Owned by the State. (About half mile N. E. Pearl point.)
Green Island	Bolton.....	Sagamore Hotel property ; near Bolton.
Gull Rock.....	Bolton.....	Owned by the State. (Opposite Hague.)
Gull Rock.....	Bolton.....	Near Dome Island.

H.

Halfway Island.....	1	Bolton.....	Owned by the State ; in Mountain Bay. (West shore north of French point.)
Happy Family Isles ..	4	Caldwell.....	Owned by the State. (South of Dome Island.)
Hatchet Islands	2	Bolton.....	Near Floating Battery Islands.
Harbor Islands (group altogether called).....	7	Bolton.....	Valuable and beautiful islands. Surveyor reports claimed by holder to have been deeded away by State.
Hen and Chickens (one group).....	1	Bolton..	Owned by the State. (South of Fourteen-mile Island.)
Hiawatha Island.....	1	Bolton.....	Owned by Dr. Jacoby, N. Y. (Next south of Leontine Island.)
Huckleberry Island.....	1	Bolton.....	Shelving Rock bay.
Huckleberry Island.....	1	Bolton.....	Owned by the State (Bare rocks S. E. from 14-mile Island.)
Hulett's Island.....	1	Hague	Near Hulett's Landing.

I.

In Red-rock Bay and vicinity, a group of half a dozen rocks.....		Bolton.....	Along the east shore.
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J.

Juanita Island.....	1	Bolton.....	Owned by the State. (South end Rodger's rock.)
Juniper Island.....	1	Hague. . .	

L.

Leontine Island.....	1	Bolton.....	Owned by the State. (In Bolton bay S. of Molican House.)
Little Harbor Island..	1	Bolton.....	Owned by the State. (South French point.)
Log Island.....	1	Bolton..	South of Shelving Rock.
Long Island.....	1	Bolton... ..	Sold to D. S. Sanford, of New York.
Loon Island.....	1	Hague....	Near Meadow point.

M.

Mallory Island	1	Hague ...	East shore south of Clark Hollow.
Mother Bunch Islands (group including one tree island and Pine Island).....	12	Bolton.....	Owned by the State. (Next south of Harbor Islands.)

N.

Narrows Island.....	1	Hague	Near mouth of brook Hulett's.
Noble's Island.....	1	Bolton.....	Near Bolton line and Hulett's Landing.

O.

Odell Islands (with small isles).....	1	Hague	Owned by the State. (North of Bluff Head at Gillett's.)
One Tree Island.....	1	Bolton.....	South of Floating Battery.

P.

Perch Island	1	Bolton.....	Near Big Burnt Island, E. shore.
Perch Island	1	Bolton..	Near Shelving rock.
Phantom Island.....	1	Bolton.....	Owned by the State. (West of Gravelly Island.)
Phelps Island.....	1	Bolton.....	Owned by the State. (Near Tongue Mt. point.)
Phelps Island (and three isles north).....	4	Bolton.....	Near Turtle Island.
Pine Island (and eight small isles)	9	Bolton.....	South of Turtle Island near Tongue Mt. point.
Prisoner's Island (and two small isles).....	3	Ticonderoga.....	Essex county.
Pudding Island.....	1	Hague	

LIST OF ISLANDS — (Concluded).

NAME OF ISLAND.	Town.	Remarks.
R.		
Ranger Island (and one small isle).....	Bolton.....	Owned by Eben Barton.
Recluse Island.....	Bolton.....	Owned by the State.
Refugee Island.....	Bolton.....	Mouth of Orcutt's bay.
Reid's Rock.....	Caldwell.....	Near east shore, south of Blair's bay.
Rock Brother's Island.....	Hague.....	South of Meadow point.
Rock Dunder (and another near).....	Hague.....	
Rocks in Red Rock bay (see I.).....	Bolton.....	Paradise Bay.
Round Rock Island (and five small isles).	Bolton.....	Near Double-head point.
Rush Island	Bolton.....	
S.		
Scotch Bonnet Island.....	Hague.....	Owned by the State. (West shore 3 miles south of Hague.)
Ship Island.....	Bolton.....	West of Pearl point, south of Juanita Island.
Skipper's Jib Island (one small island in vicinity not named).....	Hague.....	North of Van Buren Bay.
South Island.....	Caldwell..	Near West Point and Harris Bay.
Steere Island.....	Bolton.....	Owned by the State. (North of Harbor Island, west shore.)
T.		
Tea Island.....	Caldwell.....	Sold to Van Cortland.
"The Coup" group (all large and small).....	Bolton.....	Near Big Burnt Island.
The Three Brothers.....	Bolton.....	Owned by the State. (South of Recluse near west shore.)
Three Sirens (and one small isle).....	Bolton.....	Opposite Black mountain.
Turtle Island	Bolton.....	Owned by heirs of William Smith.
U.		
Uncas Island (and two isles west) ..	Bolton.	Owned by the State. (Occupied by private parties) N. W. Pearl point.
V.		
Vicar's Island.....	Hague.....	Owned by the State. (North of Harbor Islands, west shore.)
W.		
Waltonian Islands (group of 5 and 2 small isles).	Hague....	Owned by the State. (South of Friend's point.)
Watch Island (and 4 small isles).....	Bolton....	Owned by the State. (North of Black Mt. point.)
Whale Island	Hague	North of Meadow point.
Willow Island.....	Ticonderoga.....	Essex county.

I regret that the cost of the work in the other departments, where the location of disputed boundaries was so necessary, did not leave sufficient means to make a complete survey of Lake George. The total number of islands — large and small — in accordance with the above enumeration would be in round numbers one hundred and seventy-five. Upon the completion of the survey, those only will be termed islands that bear those characteristics of area and verdure, which appear to entitle them to the name. The smaller rocky projections covered with a few bushes or trees, should be called Isles; while the narrow almost submerged and sloping reefs and sharp projecting rocks will suggest their own proper titles.

SECTION XI.

TRIANGULATION.

CONNECTION OF THE BOUNDARY LINES WITH THE
SURVEYS OF THE INTERIOR.

The law of 1883 requires the present survey to connect its measurements with the surveys of the interior. The most rapid and accurate method of accomplishing this result was by triangulation, and by this method alone was it practicable to bring the detached land patents into any one harmonious system.

A great deal of consideration had to be given to the extent and character of this department of the survey. Triangulation, while accurate, is extremely expensive in a mountainous region, where the ponderous instruments, tents, baggage, and provisions of a survey party have to be carried by hand and on back over rugged ranges, across morasses and through almost impenetrable forests, where the labors of a corps of pioneers are needed to clear a pathway. Yet, great as these impediments are, they are only incidents when compared with the delay of work, and consequent unavoidable increase of cost, occasioned by the generally prevailing cloudiness or haziness of the atmosphere in the Adirondack region at elevations of from 3,000 to 5,000 feet above the Sea (between latitudes 43° and 45°), which cuts off from view, the distant mountain peaks and signal stations in one direction or another, beyond all remedy, for long periods of time.

Among the high peaks of the Adirondacks I have experienced ten consecutive days of rain at one time and at another, during a month's stay upon a mountain summit, 4,900 feet above the sea, had but three or four really good hours for nice work, in as many weeks. This condition of the atmosphere is common among the mountains. Innumerable other instances might be given, but those mentioned

will explain what I mean by the delay and cost, which the natural atmospheric conditions cause, when working on mountain summits.

Considering, therefore, the questions of time and expense, the stations which it would be absolutely necessary to occupy, and the probable time within which the work at each could be done, I formed the plan that was carried out, as hereafter described.

I determined to connect the surveys of State lands in Clinton County, near Chazy Lake with the adjacent Adirondack Survey triangulation station on Lyon Mountain, and thus determining their geographical position. The lot lines in Essex county were to be tied by measurement to the Adirondack Survey signals, in the interior, on the summits of Mount Marcy and Mount Whiteface and intermediate stations.

The converging lines of the ancient land patents in the Counties of Warren, Saratoga and Hamilton were to be tied to Mt. Hamilton, Snowy Mt. and the adjacent signals.

The boundaries in the counties of Fulton, Herkimer and Lewis I proposed to connect with signals upon Mt. Jerseyfield, Pen Mount and Gommer Hill; and those in the counties of St. Lawrence and Franklin with Moosehead mountain, Bog mountain, Mt. Azure, De Bar mountain and the station St. Lawrence. The manner in which this was finally done has been already outlined in this report.

In practice, the plan, like all plans, was found to require much more work than was desired. Additional signal stations were found to be needed. Low ranges of mountains, hitherto deemed of little importance, now asserted their consequence, by being just sufficiently high to cut off the view of certain signals. All of these difficulties were met at once and overcome, but not without great toil, care and exposure.

An account has already been given of the work done, at the signal stations on Mt. Jerseyfield, Gommer Hill, Mt. Azure, etc., and need not be rehearsed.

The new signal stations erected during the past season are as follows:

Mt. Iroquois	Essex County.
Mt. Clinton	Essex County.
Mt. Jerseyfield	Fulton County.
Bald Mountain	St. Lawrence County.
Myers Hill	Oneida County.
Sanborn Hill	Clinton County.

Birch Hill	Clinton County.
Pyon Station	Clinton County.
Caanan Station	Clinton County.
Clear Pond	Essex County.

The other stations used were :

Mt. Marcy	Essex County.
Mt. Whiteface	Essex County.
Mt. Hamilton	Hamilton County.
Mt. Azure	Franklin County.
Sable Mountain	Essex County.
Hopkins' peak	Essex County.
Carnels Hump	Essex County.
Lyon Mountain	Clinton County.
Mt. Manning	Clinton County.
Snowy Mountain	Hamilton County.
Moosehead Mountain	St. Lawrence County.
Bog Mountain	St. Lawrence County.
Gommer Hill	Lewis County.
Pen Mount <i>U. S.</i>	Oneida County.
Gore Mountain	Warren County.
Cathead Mountain	Warren County.
Crain's Mountain	Warren County.
High Dune	Herkimer County.

The triangulation was prosecuted until the middle of November, when the severity of winter, and furious storms upon the mountain tops, made it unadvisable to continue work.

The observations at the principal stations not occupied by myself were made by assistant Blake. Assistant Koetteritz on Snowy Mountain,* and assistant Farnsworth at St. Lawrence met with specially unfavorable weather. In the midst of a furious snow storm in October, the tent sheltering the survey on Snowy Mountain was destroyed and blown from the summit, and the men were compelled to seek shelter, in an icy ravine on the crest, until morning. Those who know any thing of the cliff-walled summit of this peak, and its wild and savage appearance, can appreciate the sufferings of this party in their efforts to secure the measurements needed.

On Mount Marcy and Whiteface during October and November much more severe weather was met with. The party here was an

* This party had charge of the third section of work in Hamilton county, limited — owing to weather — to the signal station mentioned.

experienced one; assistant Blake and the guides having encamped with me upon those ledgy summits during previous winters, knew in advance what had to be encountered. Nevertheless, tents crushed and torn, and frost-bitten feet, were some of their reminiscences of October above the timber line on these mountains. Yet the measurements were accomplished; and with the satisfaction of work well done, the hardships and exposure endured became almost a pleasant remembrance.

It may be necessary to explain to those who do not understand the shortness of the Adirondack summer season, and the limited time in which, by law, the results of the survey have to be reported to the Legislature, that the early part of the field-season from the time of the passage of the law (June 4th) to the end of August was of necessity wholly occupied by the land surveys, and the documentary researches necessary thereto. Not until the land surveys had reached a considerable degree of completeness was it possible to determine what angles it would be necessary to observe, in order to connect these freshly made surveys, with the measurements which we had made in former years.

The entire available survey force was also engaged until September upon the land surveys, so that the observers were not available until the boundary work had been completed in several sections. Thus it came that the winter work upon the mountain peaks was necessary.

At two stations the large twenty-inch theodolites, constructed by Oerthling of Berlin, were used, and at two other primary stations a twelve-inch theodolite by Fauth of Washington was employed.

The large 20" theodolites were those employed on the survey of the great western Lakes, and were issued to me by the Chief of Engineers of the United States Army. They were mounted upon massive oaken tripods with heavy cast-iron heads, the horizontal limbs being made to shift for position so that repetitions of angles could be easily secured without disleveling the instruments. The observations at the other stations were made with more portable instruments. At the time of writing the study of the various complications affecting the boundary lines of lands have required every attention and the reduction of the field observations in triangulation are in progress, but not completed. They will be urged forward with all possible speed.

An idea of the experiences of the parties engaged on the work of triangulation during the commencement of the Adirondack winter

may be had from the following brief extracts from my own journal while on Lyon Mountain October 29th. (See plates No. 12 and 13.)

CAMP IN THE SNOW.

“Seven days have now passed of continuous storm. Although it has been snowing steadily, the crystals are light and fleecy and easily blown before the wind. The dense fog of the clouds still envelopes us night and day and, by a curious law of crystalization by contact, have converted the entire dwarf forest into a glittering pearly mosaic—every limb, bough or minute evergreen leaf sparkling with frost work and glorious in the contrast of its spotless purity with the rugged moss-covered tree trunks, gray stems and the almost entirely hidden dark green of the balsams.”

It is a wild and singular place for a camp. The tent secured by ice hung ropes shut in by the trees bending beneath their load of mingled cloud frost and feathery snow—the wild eddying fog, the silence unbroken, save by the rush of the wind through the forest or the dull thud of the axe of the guide chopping wood for the little sheet iron stove within the tent—the sense that we are alone upon the summit of this wintry peak—so isolated and “by the world forgot”—all forces itself upon us. The place seems like an enchanted wood, not made for man; and we intruders. Yet at morning, when the sun—quite invisible—has nevertheless filled the cloud we live in with its diffused light, the little duties of the camp, the fastening down of the tent pins loosened by the storm during the night—the reading of the minimum registering thermometer, the journey of hundred paces to the ice hung and cloud wrapped signal, are events, and Hope, ever asserting itself, still looks on to the breaking away of the storm, the clearing of the skies, and the taking of the observations for which ice and snow, storm, cold and exposure are being endured.

* * * * *

RED SNOW.

November 3d the storm began to be less severe, the violent gusts of wind (which had accompanied the fall of the round hail-like snow) had subsided, and the air was becoming sufficiently clear to see the ice covered spruces four or five hundred feet away. The clouds, however, were dense and prevented any view beyond the short radius mentioned. There was nothing to be done but march up and down in the snow outside the tent for the sake of exercise,

and while thus engaged I was surprised to notice that about an inch below the surface of the last pure bluish-white snow that had fallen, there was a layer which had a darker color, and under close inspection proved to be of a slightly reddish or pinkish hue! This dirty pink color was very noticeable by the contrast with the white snow above and below it where a section has been made.

Surmising that this discoloration of the snow might have been occasioned by smoke from the little sheet iron stove I went a distance into the forest along the mountain side — a sufficient distance to avoid any such possibility — and cut into the snow repeatedly only to find the same result, a very faint red or pinkish layer of snow, about one-quarter of an inch thick, and one inch below the surface. I could not account for the phenomenon, and deeply regretted that I had no glass phials in which I could collect this snow and preserve it, even though only in the form of water, for examination. It is claimed that such red snow has been seen in the Alps and was attributed to fine dust carried by furious winds from some great volcanic eruption. I am not aware that any such volcanic disturbance had occurred within months of the time of the observance of this snow, but consider it proper to record its appearance as a matter of scientific interest.

“HÖHEN-RAUCH.”

“November 2d. The dry fog which has so plagued us for years, still obscures the horizon and cuts off all view of distant signals. I cannot, even with the most powerful telescope distinguish the Sanborn Hill signal at Chateaugay Lake. Was there ever such provoking weather? If it were summer the guides would say it is “smoke” and advise me to defer observations until “cold weather.” Now that it is cold weather they have nothing to say. It is probably “smoke” like that which we encountered in 1881 only more diffused, and accompanied by atmospheric vapor. The cold rains which preceded our arrival on the mountain have failed to wash the air clear of it, or even to remove it at all.

“Now, although snow has been falling for so long a time the *dust-haze* or Hohen-rauch is as omnipotent as ever and, like a dark smoke cloud, closes in the horizon. Neither De Bar Mountain, Mt. Azure, Whiteface nor any of the prominent peaks are to be seen, much less the lowland signals of the land survey.

“We have but to watch and wait, however, the mountain summit cannot be left until the necessary observations are secured — whatever

the difficulties and hardships may be. The fact that our labors and exposure on this ice-clad peak will not be appreciated or even understood, is no reason why we should falter in the work.

“ November 3d. There are indications of a thaw. If the atmosphere can get thoroughly moistened, and we can then have some strong gales the “ smoke ” may be cleared away and observations made. I am left with but one man now. The other could remain no longer. It is almost impossible to get men to encamp upon the mountain tops at this time of the year.

“ November 4th. The haze begins to break away and I shall get some observations.

“ November 5th, the last man has deserted and thus I am alone in camp. Cold and snow were too much for this fellow. Paid him off and was glad to have him go.

“ Got some fine observations, although, being alone, I had difficulty in securing the canvas observatory against the high wind which arose at night-fall. Descended, however, at dark to the camp with the work at last accomplished, but had to cut wood, cook my own supper (thawing snow for water) and found house-work after dark, with my limited knowledge of the location of the utensils, rather difficult. Put out the light at 9 p. m., wrapping up in soft and comfortable blankets, stretched myself upon a deep couch of evergreens and rested well until morning regardless of the catamount or lynx, which had so recently been the discussion of the camp.” * * * * *

The office work of the triangulation is in progress and the results will be hereafter given.

SECTION XII.

ELEVATIONS.

The heights of the mountains, lakes, passes, and routes through the great forest, I have already given in the preceding reports of the Adirondack Survey.

It is desirable in the present report that a general idea of the average elevations should be given of the several districts, where lands are owned by the State, to afford an idea of their climate and value. For this purpose, special observations have been made, and the results, after consideration, take the following form.

The State lands in the Jerseyfield, Lawrence and adjacent patents, are in a section where the hills or ranges of hills have a height of about 2,400 feet, and the lowlands 1,800 or 1,900 feet above the sea. The average would be low, if placed at 1,900 feet for lands both north and south of the county line.

In Clinton County, rejecting from consideration the arid lands in the Flat-rock district etc., with Chazy Lake (1500 feet) as a minimum, we may assume for the State lands in Township 5, and the vicinity an average elevation of 1600 or 1700 feet above the sea.

In the counties of Lewis and Herkimer, the State lands are so scattering, that an estimate of their elevation would be of little value. The average elevation of lands in these counties might be put at between 1200 and 1300 feet.

In the more elevated districts of Fulton and Hamilton counties, we find some mountains reaching heights of about 3,900 feet above the sea; while the lowlands reaching nearly their lowest lands at Wellstown, (950 feet,) Lake Pleasant (1,706 feet,) Raquette lake, (1,774 feet,) Blue mountain lake, (1,800 feet,) and West Canada Lakes (2,348 feet) show the diversity which is to be expected in so large an area.

Considering this district in separate sections, therefore, the Benson lands would have an average height of 900 to 1,000 feet.

The State lands in Palmer's purchase may be averaged at 1,100 or 1,200 feet above the sea; while northward, in township No. 3 of Totten and Crossfield's purchase, they reach elevations of between 2,000 and 3,000 feet.

In Essex county, the State lands are in so many locations, that an average elevation can hardly be given. In the town of Keene they are principally located between 1,800 and 4,000 feet above the sea; being upon the sides of mountains. In the other portions of this county, the State lands are generally located at less elevations, although reaching very great altitudes in North Elba and Newcomb.

In Franklin and St. Lawrence counties, the State lands are generally well located, at De Bar mountain (3,011) alone reaching any considerable height. The average elevation of the lands may be placed at about 1,700 feet above the sea.

No average height is estimated for the State lands in Warren and Saratoga counties, as they are too much scattered to make any estimate of value. The lands at Lake George rise but little above the surface of the water which is 343 feet above the Sea.

From these average elevations, it is easy to perceive, that these lands are not generally suited for profitable agriculture. Between 1,500 and 2,000 feet above the sea frosts are not uncommon in summer, and I have known the entire crop of Indian corn in one of the most fertile valleys, having an elevation of only 900 feet above the sea, destroyed by frost in a single night early in August.

Oats, however, and other hardy cereals can be profitably grown upon lands reaching an elevation of 2,000 feet above the sea, and potatoes will thrive wherever there is sufficient soil to cover them.

It is possible that sheep and hardy cattle may be raised on the lowlands, but the hay crop is insufficient for the long and tedious winters.

Much of the region must of necessity remain a forest, and the natural moisture of the climate and frequent light rains, are very favorable to tree growth.

SECTION XIII.

RAINFALL.

While conducting the Adirondack Survey, I caused regular, systematic observations of the rain-fall, to be taken at a number of stations in the northern district of the State. These daily observations have now been extended over a period of five years.

Some of the stations are in the immediate vicinity of the State lands.

As the greatest public interest now exists in the rain-fall of this section of the State, it seems proper that these observations, taken for the express purpose of ascertaining the actual local coefficients of precipitation, should in this report be made public. This is the more important as questions now pending, before the Legislature, in regard to the future management of the public lands, are largely based upon the proposition that the forests covering these lands are more or less essential to the proper and regular maintenance of the existing rain-fall, and, consequently, of the normal flow in the streams which have their rise in this region.

That the sources of the Hudson river, and of some of the principal tributaries of its affluent, the Mohawk, are located in this vast forest region, and that the great Canals of the State, depend upon these streams to a large extent for their water supply is a fact which must be admitted by all. The State has located elaborate and costly reservoirs, at many points, in the Adirondack region, notably at the Woodhull and adjacent lakes, where what is called the main branch of Black river, which heads south of the Brown tract, has been diverted for the purposes of the canals, and now divides its flow between its ancient channel and the water courses which run to the Hudson.

When the dimensions of the feeder and the great volume of water which it delivers at Boonville are considered, we cannot wonder at

the complaints that have arisen along the lower portion of the Black river valley, at Carthage and at Watertown, by mill owners and others whose industries are dependent upon the water supply of this district. If after this exhibition of the exercise of the right of eminent domain, these people view with alarm the proposed cutting of great areas of forest, upon the balance of the water-shed, on which they are now dependent for rain-fall, and appeal to the Legislature for aid to prevent such cutting away of the forests, we can certainly perceive that real, substantial reasons exist for protection, and relief from their grievances.

Another and similar case is found upon the Champlain canal, where the waters of the Hudson are poured through the Glen's Falls feeder, to the summit level of that canal, fed northward to Lake Champlain and the St. Lawrence as well as southward to its natural channel in the Hudson. Here, also, great complaint is made by mill-owners and by navigators, that the volume of the river has diminished, and that they are entitled to relief from the State.

So, in numerous localities the appeal is made for more water, and the preservation of the forest upon the State and adjacent lands, is held to be indispensable to secure the rain-fall.

The question now assumes a scientific phase. If the inquiry be made: "Have forests any influence upon the rain-fall?" it must be answered in the affirmative.

The further inquiry: "How and in what manner?" opens almost too broad a field for present answer.

To prevent any misunderstanding, however, it may be well to say, that in this department of meteorology, as in the allied branches, so many elements enter into the problem, that a full discussion of it would require a special volume.

The influence of trees may, nevertheless, be summarized, for those who desire a general idea of their value in this respect.

Rain-fall is dependent upon two variable conditions.

(1st.) The temperature coefficient; composed (*a*) of the direct radiant heat of the Sun, communicated to the Ocean or other bodies of water (*b*) of the transferred temperature of the atmosphere, also communicated to such bodies of water; [secondary elements such as organic heat, electrical influences, volcanic heat, etc., may be here disregarded.]

(2.) The vapor coefficient, dependent upon the temperature and atmospheric pressure.

Where the barometric pressure is slight, and the atmosphere thin,

water rapidly evaporates, and the intermolecular space is speedily occupied by the invisible vapor of the water.

In a word : by the heat of the sun the waters of the Ocean and the Land become converted into steam. This steam, a transparent, invisible gas and — in accordance with the law of diffusion of gases — mingles with the atmosphere, mechanically, apparently without combining with it. Into every crevice or cranny between the molecules of Oxygen and Nitrogen the transparent vapor flows, and thus the air is said to become moist, or wet. Now *wet air* is lighter than dry pure air, and, therefore, vapor of water rises, carrying with it the particles of air, among which it has become entangled.

Thus, we have the water in the atmosphere, ready to be precipitated as rain, by a sufficient change of temperature.

Now it is not the forests alone that have the power of decreasing temperature, however deep and cold their shade. Their influence is conservative and secondary, yet very important. They control and regulate local storms, and prevent undue evaporation ; but of these hereafter. Primarily, the direction of storms, is affected by the arrangement of the oceans and continents upon the Earth's surface. The vapor, produced by the sun, occasions Ocean and atmospheric currents which, as they diverge from the Equator, are affected by the variable speed of rotation of the surface of the Earth with change of latitude. The approach to the pole of a moist equatorial wind causes condensation and rain-fall.

Thus, the amount of rain is affected by the latitude of the place ; by the elevation of the ground ; by the presence of cold ranges of mountains, acting either as condensers of moisture, or as the reverse of rudders, directing or deflecting the atmospheric currents.

Here we reach the influence of forests.

If these mountain ranges are covered with forest, they entangle the air currents, and deaden the wind, more than the bare rock alone could. This fact was familiar to the owners and users of huge old wind-mills of Long Island. A house or a block of houses interposing between them and the gale would not greatly interfere with the working of the mills. The wind would bound over houses with undiminished power ; but a few trees, one or two hundred feet distant in a lot, destroyed the force of the wind, when it blew from that direction, and the mills would not grind.

Forests have consequently great power over the lower surface of the wind. A gale is a flow of a peculiar chemico-mechanical compound — diffused gases — and whatever changes the *force*, of a gale dis-

turbs the arrangement of the molecules. It is not necessary to go into a discussion of atmospheric electricity, beyond remarking that this condition of force is equally present, whether invisible or in the form of lightning. Many differences of potentiality undoubtedly exist, and might, if studied, lead us to a more exact knowledge of the law of storms than is now possessed, but they cannot be considered here.

Aside from this question of meteorological mechanics and physics, are certain simple facts known to all, which prove the value of forests as conservators of moisture.

The snows of winter are shielded from the sun in the forest, and remain long after they have disappeared from the open fields. Thus, in spring time, the continued coolness of the woods aids to condense the warm, moist winds; and, after sufficient re-action, rain may be produced from clouds that, otherwise, would have passed by without any precipitation.

Similarly, in summer, great extents of cold, moist forest upon mountain slopes cannot but have their influence upon warm clouds overburdened with moisture, and by lowering their temperature, initiate the rain-fall. It is very possible that when rain has actually commenced to fall, and any great change is produced in the condition of the atmosphere, the latent heat of the vapor may be suddenly converted into electricity and flow off to the earth; then the clouds, reduced to a still lower temperature, would copiously precipitate rain.

The influence which trees and forests have upon the atmosphere is too well known, however, to require elaborate discussion. The pointed brush like tops of the pines are like so many electrical collectors, and their stems only too often serve as lightning rods.

In our dense northern forest areas, severe hail storms are very rare and one never hears of those enormous hail-stones, which in less favored localities, at times have ruined buildings, destroyed cattle or compelled man himself to seek secure shelter.

That this exemption is not due to our location, or to the latitude, I am able to prove.

In the Brant Lake region, in Warren County, is a great extent of burnt country. Here, repeated forest fires have swept away almost all the valuable timber, and gloomy wastes of arid rock and sterile sands are the result. The elevated rocky ridges would be everywhere exposed, but for the mosses and ferns and aspens, which through lapse of time have found a foot hold, and are endeavoring,

in their humble way, to make good the injuries done by man. The aspens, or "popples" as they are locally called, are graceful deciduous trees, whose fluttering leaves and pale olive tinted stems, make them very picturesque. These trees, along the shores of Brant lake, have now reached an elevation often, of twenty feet; and, passing that way in 1880, I was astonished by the appearance of the stems, which upon one side were all discolored, blackened, knotted and drawn up as though by some disease. The peculiarity was that this appearance was all upon one side of the trees; and later on, studying the phenomena, more closely, I found a number of goodly sized trees from which the bark, on one side near the tops of the trees, had been cut away or hung in strings.

This singular injury to the aspens, continued for a mile or more. On careful inquiry, I learned, that it had been caused by a severe hail storm several years before.

Such an occurrence; a general cutting of the bark from the tree tops; has never come under my observation in the wilderness. Its occurrence in this semi-arid district is in accordance with the results of European observations, where it is claimed, the severe hail-storms always occur in deforested districts. This has been regarded in the light of an established scientific principle, and instruments have been devised to discharge the electricity of the clouds. M. Arago, the famous French philosopher, suggested that captive balloons provided with conductors, should be raised to great heights, and thus the electricity be drawn off sufficiently, to prevent the sudden change which produces hail.

Neither balloon nor paragrèle has yet, however, shown that it can compare in efficacy with the innumerable discharging points offered by a great forest. Indeed it does not require any great effort of intellect to perceive that a few slender conductors, even if elevated to a great height, cannot compare in power with the millions of natural conductors — the trees — that covering ridges, hills, and mountain ranges, struggle with general success against the wind, and perform the office of maintaining the electric equilibrium silently and efficaciously.

Hail is but one form of rain; if trees can influence the one, they certainly must have power over the other. The judgment of science is, that forests do exert a potent influence over the rain-fall. This influence is to be sought, in the regulation of the rain-fall, through the months and seasons, rather than in any increase or decrease of the normal precipitation.

Rain-fall depends primarily, as I have said, upon the sun's power of evaporation. What the sun converts into steam is condensed by cold — or by change of its heat into some form of correlated force — again into water.

It is, evidently, to man's interest that this evaporation, this absorption of water, shall be had from the Ocean as far as possible, or if the moisture be drawn from the Earth, that it be reprecipitated upon the Earth again. If the clouds should procure their moisture from the surface of the Earth, and pour their rain out only upon the Sea all the choice agricultural lands of the world would rapidly become sterile and worthless, and all organic life would disappear from the land.

It is, therefore, of the first importance that the natural conditions of rain-fall and evaporation as at present existing, should be maintained; and that trees shield the soil from the sun's rays, will not be disputed.

In the Adirondack region, the forestry question is complicated by many conditions.

There are many kinds of forest, and beneath each group of trees will be found a different sort of foot-hold.

The deciduous trees, beeches and maples, have usually, a thin deposit of leafy mould, covering sand or stones as the case may be. The evergreens on the contrary, grow in a deep "wooden-soil"; the "spruce-duff" in many places having a depth of several feet. Upon the high mountain sides this spruce-duff is often deeply covered with the most luxuriant peat moss, (*sphagnum*), into which the foot of the traveler descends as though into snow; except that this vivid green moss is often a sponge of water. Its roots are usually dripping, and for weeks after rains have ceased, the explorer who attempts to climb these semi-alpine peaks will find his limbs drenched with icy water, from these deep peat mosses. This moss forms a little forest under the great forest. Thronging together, closer than the soldiers of the old Macedonian phalanx, each stem is a little evergreen six, eight, or ten inches in height from the root to the tufted top. Dying at the roots they form that peculiar humus, whose affinity for water is so great, that these peat mosses upon the mountain sides, have been called hanging-lakes; as though they were bodies of water suspended and held in this peculiar vegetation.

These deposits are found among the high Adirondack peaks at the sources of the Hudson, the Opalescent, the Boreas, the Schroon, the Au Sable and the Boquet rivers, at elevations of from 2,000 to

4,000 feet above the Sea. They are extremely curious and interesting. At lake Tear-of-the-Clouds, at Moss lake, at the lakes upon the summit of Wallface mountain; in the Elk pass, the Caraboo pass, in the Indian pass, and in all the gorges and ravines among the mountains, I have found these mosses, and these deep deposits of humus. Here we find rills and streams springing forth unexpectedly on every hand. Subterranean waters are heard gurgling deep beneath our feet, in the unseen channels, amid the wooden soil and humus. Each group of boulders that thrusts its head above the duff, has its cluster of water-pockets in the irregular cavities between. Here, we have the sources of our rivers, for at these altitudes, the gauge tells us, that the rain-fall of the region reaches its maximum.

The register of the observations, taken during the Adirondack Survey, is shown in the following tables:

S. N. Y. — ADIRONDACK AND STATE LAND SURVEYS.

Mean temperature and rain-fall records at KEENE VALLEY, Essex Co., for the years 1879, '80, '81, '82, '83.

Rain-fall record.

YEAR.	January. Inches.	February. Inches.	March. Inches.	April. Inches.	May. Inches.	June. Inches.	July. Inches.	August. Inches.	Septemb'r. Inches.	October. Inches.	Novemb'r. Inches.	December. Inches.	Total rain-fall. Inches.
1879.	1.35	2.44	2.49	2.24	0.82	2.72	2.89	1.99	2.93	0.88	4.66	2.97	28.38
1880.	3.33	2.69	1.75	2.18	2.74	1.65	3.05	2.68	3.65	3.77	2.86	0.77	32.12
1881.	2.08	2.20	4.10	1.01	2.99	2.56	2.25	2.89	3.21	2.42	1.72	3.20	30.63
1882.	1.73	1.99	4.31	0.94	2.46	4.05	1.88	2.62	3.74	0.73	1.43	1.74	27.62
1883.	1.55	2.60	1.83	1.57	6.03	2.73	3.41	1.32	2.54	2.39	1.99	1.14	29.10

Altitude 1,000 feet above the sea.

Temperature record.

YEAR.	January. Deg. Fah.	February. Deg. Fah.	March. Deg. Fah.	April. Deg. Fah.	May. Deg. Fah.	June. Deg. Fah.	July. Deg. Fah.	August. Deg. Fah.	Septemb'r. Deg. Fah.	October. Deg. Fah.	Novemb'r. Deg. Fah.	December. Deg. Fah.	Yearly mean tem- perature. Deg. Fah.
1879.	20.50	18.79	28.44	37.85	56.50	61.38	34.96	62.25	54.43	54.73	33.38	24.66	40.66
1880.	29.66	23.20	25.64	39.68	56.84	60.76	62.78	60.63	55.88	42.33	27.20	15.68	41.69
1881.	10.52	4.71	28.26	36.12	57.05	54.84	64.07	63.64	62.49	44.84	34.94	31.69	41.93
1882.	18.37	25.07	28.43	36.35	41.83	58.76	63.83	62.79	54.90	47.24	28.96	20.00	40.54
1883.	12.35	18.96	19.40	35.51	48.14	63.81	63.32	60.75	52.66	41.75	34.85	20.87	39.36

O. S. PHELPS, Observer.

Rain-fall records at POTTERSVILLE, Warren Co., for the years 1879, '80, '81, '82.

YEAR.	January. Inches.	February. Inches.	March. Inches.	April. Inches.	May. Inches.	June. Inches.	July. Inches.	August. Inches.	Septemb'r. Inches.	October. Inches.	November. Inches.	December. Inches.	Total rain- fall for the year. Inches.
1879.....	1.36	2.90	3.97	2.25	0.08	2.86	2.20	1.42	2.74	0.81	3.48	4.27	28.34
1880.....	2.04	1.26	1.46	0.75	3.56	1.19	2.46	1.28	2.62	3.21	4.47	0.91	25.21
1881.....	3.03	2.70	2.69	0.21	0.00	1.80	2.12	3.57	2.25	2.10	1.78	3.93	26.18
1882.	1.08	1.70	3.35	1.04	0.76	1.71	3.11	1.34	1.87	1.03	0.86	2.18	20.03

Altitude nearly 900 feet above the sea.

L. and R. L. LOCKE, *Observers.*

Rain-fall records at EDMUND'S PONDS, Essex Co., for the year 1881.

YEAR.	January. Inches.	February. Inches.	March. Inches.	April. Inches.	May. Inches.	June. Inches.	July. Inches.	August. Inches.	Septemb'r. Inches.	October. Inches.	November. Inches.	December. Inches.	Total rain- fall for the year. Inches.
1881.	2.60	2.24	9.02	3.80	3.25	3.00	3.76	5.55	3.63	3.03	2.33	3.86	46.07

Computed annual means..1879, 42.66 inches; 1880, 48.31 inches; 1882, 41.21 inches; 1883, 43.80 inches. Altitude 2,000 feet above the sea.

N. MILLER, *Observer*

Mean temperature and rain-fall records at PLATTSBURGH, Clinton Co., for the years 1880, '81, '82, '83.
Rain-fall record.

YEAR.	January. Inches.	February. Inches.	March. Inches.	April. Inches.	May. Inches.	June. Inches.	July. Inches.	August. Inches.	Septemb'r. Inches.	October. Inches.	Novemb'r. Inches.	December. Inches.	Total rain-fall. Inches.
1880.....	1.75	1.69	1.21	1.27	1.49	2.02	2.00	1.65	2.43	4.54	2.67	0.89	23.61
1881.....	1.60	1.12	2.36	0.30	2.93	1.27	2.35	2.57	1.99	1.84	1.50	1.76	21.59
1882.....	1.06	1.96	2.70	0.86	1.70	4.78	2.22	2.01	4.72	1.04	0.54	1.69	25.28
1883.....	0.99	1.37	1.66	0.86	4.39	3.20	3.40	1.17	2.49	1.81	1.75	0.96	24.05

Altitude 150 feet above the sea.

Temperature record.

YEAR.	January. Deg. Fah.	February. Deg. Fah.	March. Deg. Fah.	April. Deg. Fah.	May. Deg. Fah.	June. Deg. Fah.	July. Deg. Fah.	August. Deg. Fah.	Septemb'r. Deg. Fah.	October. Deg. Fah.	Novemb'r. Deg. Fah.	December. Deg. Fah.	Yearly mean tem- perature. Deg. Fah.
1880.....	27.38	21.51	25.37	41.67	59.80	60.48	69.92	67.52	61.47	46.46	30.84	18.69	44.76
1881.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882.....	17.88	22.43	28.00	37.14	50.27	63.64	63.42	69.10	59.44	51.07	33.45	21.96	43.66
1883.....	11.99	17.70	18.29	37.90	51.88	66.59	68.15	66.50	56.50	44.59	36.83	21.01	41.19

GEORGE W. PRIES, Observer.

Mean temperature and rain-fall record at CLINTON PRISON, Clinton Co., for the years 1880, '81, '82, '83.
Rain-fall record.

YEAR.	January. Inches.	February. Inches.	March. Inches.	April. Inches.	May. Inches.	June. Inches.	July. Inches.	August. Inches.	Septemb'r. Inches.	October. Inches.	Novemb'r. Inches.	December. Inches.	Total rain-fall. Inches.
1880	3.25	3.81	4.00	1.89	4.09	5.26	4.71	4.18	5.16	4.91	3.77	3.82	44.67
1881	3.69	3.13	3.98	2.06	3.90	4.82	5.06	6.12	4.98	4.21	4.61	4.25	50.81
1882	3.12	2.97	3.59	0.79	4.15	3.79	5.27	4.31	4.05	3.49	3.61	3.15	41.89
1883	3.86	3.34	3.42	2.22	4.35	5.06	5.85	4.70	3.50	5.17	5.02	4.19	50.68

Altitude 1,200 feet above the sea.

Temperature record.

YEAR.	January. Deg. Fah.	February. Deg. Fah.	March. Deg. Fah.	April. Deg. Fah.	May. Deg. Fah.	June. Deg. Fah.	July. Deg. Fah.	August. Deg. Fah.	Septemb'r. Deg. Fah.	October. Deg. Fah.	November. Deg. Fah.	December. Deg. Fah.	Yearly mean tem- perature. Deg. Fah.
1880.....	22.45	26.80	30.10	42.37	51.89	67.31	67.90	65.78	58.36	45.18	33.29	20.09	44.29
1881.....	16.12	20.45	31.17	40.05	50.82	66.19	66.48	64.91	58.76	44.10	34.30	19.96	42.81
1882.....	21.19	21.10	30.65	41.27	52.10	64.30	67.20	66.05	56.27	42.63	35.85	24.60	43.88
1883.....	16.73	21.20	22.49	40.77	51.60	46.61	66.83	65.55	57.64	45.55	36.72	20.71	42.65

B. DE MONTFORT, Observer.

Rain-fall records at ELIZABETHTOWN, Essex Co., for the years 1879, 80, '81, '82.

YEAR.	January. Inches.	February. Inches.	March. Inches.	April. Inches.	May. Inches.	June. Inches.	July. Inches.	August. Inches.	September. Inches.	October. Inches.	November Inches.	December. Inches.	Total rain-fall. Inches.
1879.....	0.74	0.73	1.79	3.08	0.66	2.17	....	8.45-5 mos.
1880.....51	1.89	3.81	1.62	3.84	4.09	2.46	....	16.56-6 mos.
1881.....	0.44	2.71	3.19	2.00	4.72	2.68	1.75	0.17	0.30	15.72-7 mos.
1882.....				2.09	2.87	3.65	0.84	0.94		17.03-9 mos.

Altitude 552 feet above the sea.

Computed annual means...1879, 17.91 inches ; 1880, 29.55 inches ; 1881, 26.69 inches ; 1882, 22.84 inches.

C. W. H. LIVINGSTON, Observer.

These observations furnish the first records of rain-fall in the Adirondack region, extending over any considerable period of time. The most important result is, the indication given of the increase of rain-fall, with altitude, by comparison of the observations taken at four of the stations.

At Keene Valley, in Essex county, the rain-fall in 1881 was..... 30.63 inches.

At Edmonds ponds, 1,000 feet higher than Keene, during the same year the rain-fall was..... 46.07 inches.

A difference of..... 15.44 inches.

In Clinton county at Plattsburgh in 1881 the rain-fall was..... 21.59 inches.

At Clinton prison, 1,200 feet above Plattsburgh, during the same year the rain-fall was..... 50.81 inches.

A difference of..... 29.22 inches.

The frequency of storms in the vicinity of Lyon mountain may account for this greatly increased rain-fall. It is more than would be expected, ordinarily, for the difference of elevation.

The records, however, enable us to make one comparison, which is startling, even, if not conclusive.

Records of rain-fall at Plattsburgh academy, taken under the direction of the Regents, afford the data given in the next table. Admitting that the periodical fluctuations of the rain-fall may reach a difference of two or three inches between different years, how is the great change indicated by the old, and the recent observations at Plattsburgh to be accounted for.

Comparing three years from each series of observations we have—

YEARS.	Rain-fall, inches.	YEARS.	Rain-fall, inches.
1847.....	47.26	1881.....	21.59
1848.....	32.00	1882.....	25.28
1849.....	35.02	1883.....	24.05
Mean	38.09	Mean	23.64 inches.

Here, we find a decrease in the rain-fall in thirty-four years of 14.45 inches. It is to be remarked that during this interval a great portion of the forest in Clinton and the adjacent counties, has been cut away and removed.

Yet, we cannot assert, positively, upon this information, that the average rain-fall of northern New York has decreased, although the comparison just made is striking and suggestive.

The rain-fall observations herewith transmitted are placed in the report for record where they may be accessible for consultation. They tell the monthly and daily changes in precipitation that have occurred, and are the only recent contributions to this subject from the Adirondack region.

Early rain-fall records at PLATTSBURGH, Clinton Co., N. Y.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septemb'r	October.	November.	December.	Total. Year.
1847.	4.10	3.56	4.12	4.03	70	7.19	3.75	2.76	6.25	3.57	2.13	2.04	47.26
1848.	2.75	3.69	3.04	1.58	2.44	2.39	2.89	2.07	1.21	4.52	2.71	2.67	32.00
1849.	2.30	2.59	3.69	2.76	3.92	1.64	0.95	3.63	2.46	5.49	2.45	3.17	35.02

CONCLUSION.

The location of a great number of the disputed boundaries of the patents and grants, which include the State lands, has now been made. From the confusion of duplicate and triplicate systems of lines, the old and original boundaries have been rediscovered, proved and permanently marked. A great mass of detail work ought yet to be done, but the means at command have only been sufficient, to deal with the pressing questions of disputed limits. These have been settled. Hereafter, these lines will become the reference bases in the surveys, not only of public but of private lands.

The field work has been extremely difficult and toilsome. The researches have not been in the line of new and direct work, but have involved a great extent of technical study, and the collection of historical evidence in logical legal form, to prove the boundaries that were rediscovered.

The scattered condition of the lands, within which the operations of the survey have been carried on, have made the area enormous. The great forest region of northern New York is imperial in size. Within its limits the entire State of Connecticut might be included, and an ample margin of woodland remain.

The vast forests, which were all once the property of the State, after the revolution, were to a great extent, disposed of at small prices. It was believed that they would yield more revenue to the State through taxes, than could accrue through their retention as a public domain. This theory, carried to the utmost in regard to forest lands has favored speculation, and has been really of vast detriment to the public interests. Forest lands, under the old and prevailing system of lumbering in this country, can yield but one profitable crop of timber in a generation. Hence, the practice has been to

allow the lands to lapse to the State for unpaid taxes, after the best or soft-wood timber has been cut. When the second growth became of value, the same lands were often again purchased from the State for accrued taxes; and thus ownerships changed, reckless cutting went on, the original landmarks were neglected and forgotten, and boundaries became obliterated.

The neglect, mismanagement and complications of a century were thus handed down to us. The manner in which many of these problems have been solved and settled, has been given in this report.

Had it not been for the work of the Adirondack Survey, and the study of the ancient land lines made in preceding years, the present work could not have been executed with the success, rapidity and dispatch which has characterized it.

The work of the Adirondack Survey, after the completion of the base-lines at Lake George in 1883, was limited to the arrangement of data and the supervision of the office and map work that had been already commenced. The limited appropriation for that survey was exhausted in carrying out the work over wild districts, where the greatest difficulty was experienced on account of the density of the forest, impeding the view and hindering alike the triangulation and plane table work.

The appropriations made for these surveys have been altogether too limited for the work proposed to be done. In order to have sufficient means to carry out the requirements of the law, it became necessary for the Superintendent to carry on the work of both the Adirondack and State Land surveys without compensation therefor, the whole amount of his salary for the season of 1883 and 1884 having been expended upon the work of those surveys.

The responsibilities and cares connected with the location of these disputed boundaries, extending through ten counties, and affecting the ownership of vast areas of adjacent property, have been very great. The intricacy of the problems involved has made the preparation of the present report within the limited time required, a labor of remarkable difficulty.

Such other and further results as may be reached, and which it

may be proper to present to the Legislature, will be transmitted in a future report.

The accounts of expenditures, together with vouchers and detailed bills of items therefor, in accordance with the law, have been filed with the Comptroller. An abstract of these accounts is hereto annexed.

A list of the State lands, giving their location and area, is also appended, together with maps of the lands and plates to illustrate this report; all of which is

Respectfully submitted.

VERPLANCK COLVIN,

Superintendent.

LIST OF PLATES

ACCOMPANYING THE REPORT ON STATE LAND SURVEY.

Signal St. Lawrence.

PLATE.

- No. 1. Station connecting triangulation with the River St. Lawrence and the Boundary Line between the United States and Canada. See page 16.

Survey Party.

- No. 2. Survey party engaged on location of County line between Herkimer and Oneida counties, moving from camp on the Banks of Moose River. See pages 14 and 110.

Shore of Raquette Lake.

- No. 3. View from Steamboat landing at Kenwills, showing character of lands recently sold by the State. See page 28.

Indian Village of St. Regis.

- No. 4. Mouth of the St. Regis River; showing its junction with the St. Lawrence. See page 15.

Indian Church at St. Regis.

- No. 5. And the banks of the St. Lawrence, near the monument at the termination of survey lines, measured from the Hudson. See page 16.

Group of Indians at St. Regis.

- No. 6. Remnant of the Iroquois or Six Nations who occupy what is known as the St. Regis Reservation. See pages 16 and 17.

Signal Mt. Azure.

- No. 7. Station on the lower St. Regis; Solar Transit mounted on high tripod. See page 18.

Chateaugay Lake.

PLATE.

- No. 8. View south-westward toward Thomas' point from landing at Ralph's; the county line lying between the distant mountains on opposite lake shore. See page 22.

Ragged Lake.

- No. 9. View from Transit-station southward along east shore, showing character of the forest. See page 23.

Lyon Mountain Iron-mines.

- No. 10. View northward toward Ellenburgh; Panther mountain; Ellenburgh mountain. See page 25.

Hohen-rauch.

- No. 11. Smoky atmosphere in winter, the dust-haze of the Germans — the great impediment to long sights in Triangulation. See page 163.

Cloud Frost.

- No. 12. Signal on mountain peak, encrusted by frost deposited by clouds, Oct. 29th, 1883. See page 162.

Camp in the Snow.

- No. 13. Winter on the mountain peak, October, 1883; taking the morning observations. See page 162.

Crayon Sketches.

- No. 14. High Adirondack peaks and wild forest, from Basin mountain.
- No. 15. View of Chateaugay Lake, showing character of lands in Township No. 5 Old Military Tract.
- No. 16. High peaks of the Adirondacks from Boreas river, near La Bier's place.
- No. 17. High peaks of the Adirondacks from North Elba, Essex County.
- No. 18. View from Mount Hurricane.

LIST OF MAPS.

- Map of the Wilderness showing the land patents.
- Map of lands in Hamilton county.
- Map of lands in Fulton county.
- Map of lands in Essex county.
- Map of lands in Franklin county.
- Map of lands in Clinton county.
- Map of lands in St. Lawrence county.
- Map of lands in Herkimer county.
- Map of lands in Lewis county.
- Map of lands in Warren and Saratoga counties.
- Map of Township No. 5 Old Military Tract.
- Map of Jerseyfield and adjacent patents.
- Map of county line Servis patent, between Oneida and Herkimer counties.
- Map West Canada Lakes and Cedar Lakes (State lands.)
- Map of part of Palmer's purchase.
- Map of lots in Roaring Brook Tract.
- Map of lots in Old Military Tract.
- Diagrams explanatory of the work.

APPENDIX A.

SUMMARY GIVING

THE LOCATION AND AREA OF STATE LANDS IN 1884.*

Clinton county	42,019 acres.
Essex county	158,937 “
Franklin county	160,121 “
Fulton county	18,035 “
Hamilton county	251,972 “
Herkimer county	21,412 “
Lewis county	6,767 “
Saratoga county	13,613 “
St. Lawrence county	43,241 “
Warren county	30,683 “
Total in these ten counties.....	<u>746,800 acres.</u>

* The acreage as given in the summary has been reduced somewhat by the redemption of certain tax lands, as shown in the detailed statement by counties given hereafter.

APPENDIX B.

LIST OF STATE LANDS

ACQUIRED PRIOR TO 1881.

CLINTON COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres 31,260.42; of which 10,724.75 acres are prison lands.

DETAILED STATEMENT.

Duerville Patent.

Town and lot.	Area in acres.
Dannemora :	
1. Ex. 47 a. N. W. Cor., 90 a. N. E. Cor, 21 $\frac{77}{100}$ a. S. W. Cor., 27 a. being so much of 74 a. b'd N. by lot line and Nelson's 105 a. N. E. Cor. of lot, E. by said Nelson, and another, S. by M. Nana and W. by lot line, as is not heretofore excepted	64 $\frac{23}{100}$
S. E. Cor.	43
2. Ex. 155 a. W, side, 55 $\frac{3}{4}$ b'd N. by Rand Hill Road, E. by line par'l to and 18 r. E. of W. line of this parcel, S. by lot line and W. by 155 a. W. side of lot, and 26 a. b'd N. by lot line, E. by Parks. S. by Highway and W. by Shaw.	63 $\frac{1}{4}$ a
S. E. P't.	91 a
7. All in Dannemora.	46 a
Beekmantown :	
29. W. $\frac{1}{2}$, ex 35 $\frac{5}{8}$ a. N. P't and 45 a. S. W. Cor. thereof.	44 $\frac{3}{8}$
35. S. W. Cor., in Beekmantown	65

Town and lot.	Area in acres.
Altona :	
45. N. W. Cor.....	59
Beekmantown :	
52. S. W. $\frac{1}{4}$	62 $\frac{1}{2}$
82. Ex. 15 a. N. W. Cor., 37 a. S. E. Cor., 51 a. S. W. Cor. and 67 $\frac{3}{10}$ a being so much of 72 $\frac{1}{2}$ a. N. E. Cor, as is contained in E. $\frac{1}{2}$	79 $\frac{7}{10}$
Altona :	
97.	250
118. Ex. 72 a. W. side.....	178
120.	250
121.	250
122. N. $\frac{1}{2}$ and S. E. $\frac{1}{4}$	187 $\frac{1}{2}$
135. N. W. Cor.....	48

GORES.

LIVINGSTON'S GORE.

Saranac :	
30. Ex. 32 $\frac{3}{100}$ a. E. Pt. 7 c. 37 l. wide on N., and 7 c. 15 l. on S. line, and 135 a. W. Pt.....	39 $\frac{97}{100}$
61. S. E. cor.	37
62. E. Side	62 $\frac{1}{2}$

REFUGEE GORE,

South of Duerville Patent.

Plattsburg :	
6. All in Plattsburgh	139

STATE GORE,

between Old Military and Refugee Tracts.

Altona :	
22. Ex. 10 $\frac{44}{100}$ a, a gore on S. line, and und. $\frac{1}{2}$ of rem. paid by J. C. Hubbell,	69 $\frac{78}{100}$
43. On W. line, 3 c. 33 l. N. from S. W. Cor., 15 c. 25 l. long N. and S. and 10 c. 50 l. wide E. and W. Bought for prison purposes Apr. 28, '69.	16
44.	200
45.	200
46. B'd beg. 1 r. E. of W. line S. 14 c. 67 l. from N. W. Cor. of lot, th. S. 87°. E. 21 c. 14 l th. S. 3°. W. 13 c. 65 l. to a. brown ash tree, marked, th. S. 86°. W. 1 c. 40 l. to a balsam tree, marked, th. N. 47°. W. 4 c. 4 l. to a birch tree,	

State Gore — continued.

Town and lot.	Area in acres.
marked, th. N. 4°. W. 97 c. to a stake in S. line of 10 a. Mill lot. th. N. 87°. W. 16 c. 52. l. to a stake and stones 95 l. N. of the large bolt in centre of bridge crossing the river on W. line of lot 46 and th. N. on lot line to beg. Bought for prison purposes July 25, '69.	23 $\frac{1}{5}$
46. B'd beg. on E. line of lot at S. E. Cor of land conveyed to Samuel Shaw by G. M. Beckwith and Henry S. Johnson, Ex. rs. 15 c. S. of N. E. Cor. of lot, th. W'ly along the S. line of said land 13 c. 86 l. to N. E. Cor of 10 a. mill lot, th. S'ly along E. line of said Mill lot and a part of said lot sold to Mr. Jarvis, about 15 c. 67 l. to S. E. lot Cor. of said Jarvis' land, th. W'ly along said Jarvis land about 21 c. to W. line of lot, th. S'ly along lot line 9 c. 10 l. to a stake at N. W. Cor. of 40 a. S. side of lot 46, th. E'ly along N. line of said 40 a. to E. line of lot and th. N'ly along said E. line to beg. Bought for prison purposes Aug. 10, '69.	49 $\frac{9}{10}$
47.	200
48.	200
50. All in Altona	49
Dannemora:	
50. All in Dannemora	144
Altona:	
51. All in Altona	60
Dannemora:	
51. All in Dannemora	144
53.	200
54.	200
55. Ex. 15 a. sold to M. St. German, 185 a. Bo't for prison purposes Sep. 4, '68	200
56.	200
57.	200
58. Bought for prison purposes Sep. 13, '66	154
59. Bought for prison purposes Sep. 13, '66	200
60.	200
61.	175
62.	176
63.	176
64.	152
65. Ex. und. $\frac{1}{4}$ paid by J. M. Davison	150

OLD MILITARY TRACT.

Township 3.

Town and lot.

Area in acres.

Black Brook :

7.	967
10. Ex. 189 a. N. W. Cor. square	664
15.	1066
17. Sub. 3.....	85
17. Sub. 8.....	85
17. Sub. 9.....	85
18. Ex. 80 a. S. E. Cor.....	773
27.	853
33. Ex Subs. 1, 2 and 3, (being all N. and W. of Sampson Pond) 460 a. and S. E. Cor., 50 a....	343
41. N. $\frac{1}{2}$	426
72. S. E. Cor.....	10
73. Ex. und. $\frac{1}{2}$ paid by Jno. Taylor Cooper.....	237 $\frac{1}{2}$
74. Ex. 100 a. N. W.....	753

Township 4.

Saranac :

1. All in Saranac.....	114
7. S. W. Cor.....	190

Black Brook :

9. Sub. 7.....	85
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Saranac :

15. S. P't, 354 a. ex. 106 $\frac{2}{3}$ a. W. end of S. $\frac{1}{2}$ and 53 $\frac{1}{3}$ a. S. $\frac{1}{2}$ of 106 $\frac{2}{3}$ a. E. end of S. $\frac{1}{2}$	194
32. B'd N. by Highway, E. by Tromblay and W. by Gokey	99
62. Ex. 50 a. S. E. Cor., 50 a. S. W. Cor. and 400 a. on N. line adj. 50 a. N. E.....	140

Black Brook :

89. W. end of 140 a. N. P't.....	70
90. Sub. 2.....	160
91. B'd. N. by Highway, E. by lot line, S. by J. P. Sayers, or J. B. Sayers, or J. B. Hayrs or S. B. Sayrs and W. by J. Healey or J. Haley.....	74
91. S. E. Cor.....	71

Township 5.

Ellenburgh :

43. S. W. Cor.....	50
72.	213
105. S. E. Cor.....	71 $\frac{1}{3}$

Township 5, O. M. T. — continued.

Town and lot.	Area in acres.
123. Bought for prison purposes July 27, '68	213
124. do do	213
125. do do	213
126. do do	213
129. do do	213
130. do do	213
160.	213 $\frac{1}{3}$
161. ..	213 $\frac{1}{3}$
171. Bought for prison purposes July 27, '68.	213 $\frac{1}{3}$
172. do do	213 $\frac{1}{3}$
174. do do	213 $\frac{1}{3}$
175. do do	213 $\frac{1}{3}$
176. do do	213 $\frac{1}{3}$
178. do do	213 $\frac{1}{3}$
179. do do	213 $\frac{1}{3}$

Dannemora and Ellenburgh:

181. Bought for prison purposes July 27, '68	213 $\frac{1}{3}$
182. do do	213 $\frac{1}{3}$
183. do do	213 $\frac{1}{3}$
184. do do	213 $\frac{1}{3}$
185. do do	213 $\frac{1}{3}$
186. do do	213 $\frac{1}{3}$
187. do do	213 $\frac{1}{3}$
188. do do	213 $\frac{1}{3}$
189. do do	213 $\frac{1}{3}$
190. do do	213 $\frac{1}{3}$

Dannemora:

231. Bought for prison purposes July 27, '68	213 $\frac{1}{3}$
232. do do	213 $\frac{1}{3}$
233. do do	213 $\frac{1}{3}$
234. do do	213 $\frac{1}{3}$
235. do do	213 $\frac{1}{3}$
236. do do	213 $\frac{1}{3}$
237. do do	213 $\frac{1}{3}$
238. do do	213 $\frac{1}{3}$
239. do do	213 $\frac{1}{3}$
240. do do	213 $\frac{1}{3}$
241. do do	213 $\frac{1}{3}$
242. do do	213 $\frac{1}{3}$
243. do May 13, '67	213 $\frac{1}{3}$
244. do July 27, '68	213 $\frac{1}{3}$
245. do do	213 $\frac{1}{3}$
246. Ex. 10 a. b'd N. by lot 236, and W. by Chazy Lake, and extending E. and S. far enough to make 10 a. in a square form. Bought for prison purposes May 13, '67	203

Township 5, O. M. T. — continued.

Town and lot.	Area in acres.
247. Bought for prison purposes, July 27, '68.....	213 $\frac{1}{3}$
248. do do	213 $\frac{1}{3}$
249. do do	213 $\frac{1}{3}$
291. do do	213 $\frac{1}{3}$
292. do do	213 $\frac{1}{3}$
293. do do	213 $\frac{1}{3}$
294. do do	213 $\frac{1}{3}$
295. do do	213 $\frac{1}{3}$
296. do do	213 $\frac{1}{3}$
297. do do	213 $\frac{1}{3}$
298. do do	213 $\frac{1}{3}$
299. do do	213 $\frac{1}{3}$
300. do do	213 $\frac{1}{3}$

Township 6.

Ellenburgh :

15. N. E. Cor.....	26
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Clinton :

32. N. P't of E. $\frac{1}{2}$	200
37. Sub's. 1 and 3.....	110 $\frac{29}{100}$

Ellenburgh :

39. N. end.....	140
59. W. side.....	208
59. N. end of 54 a. E. P't of 262 a. W. side.....	37 $\frac{26}{262}$

1

Clinton :

61. What remains of 351 a. N. E. cor. 320. r. N. and S. and 175 $\frac{1}{2}$ r. E. and W. after. ex. so much thereof as is contained in 286 a. E. P't of lot.	65
73. Sub. 7.....	60
79. Ex. 78 a. S. E. cor.....	562
85. N. E. cor., 380 r. long. N. and S. 98 r. wide E. and W.....	232
85. On S. line 132 r. E. from S. W. cor., 195 r. long N. and S. and 45 r. wide E. and W.....	50

Plattsburgh Old Patent.

Plattsburgh :

66. S. E. $\frac{1}{4}$	100
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Platt's 6,600 a. Patent.

Schuyler Falls :

5. N. $\frac{1}{2}$	110
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Refugee Tract.

333 $\frac{1}{3}$ a. Lots.

Saranac :

10. In Saranac, adj. 111 a. W. end.....	36
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Refugee Tract — continued.

Town and lot.	Area in acres.
Plattsburgh:	
10. E. P't in Plattsburgh.....	177
16. N. E. cor.....	50
420 a. Lots.	
Chazy:	
7. S. E. cor.....	45
Altona:	
57.	420
83. Small lot this the whole.....	290
84.	420
108.	420
109.	420
Mooers:	
149. S. P't.....	156
176. S. E. cor.....	48
Altona:	
190. Ex. $96\frac{62}{100}$ a. N. E. cor. b'd N. 23 c. by lot line, W. by line running S. $10^{\circ} 31'$ W. 41 c. 41 l. to turnpike, S. by line running S. 76° E. 12 c. 94 l. and S. $72^{\circ} 45'$ E. 10 c. 13 l. to lot line and E. by lot line, $65\frac{15}{100}$ a. S. E. cor. b'd N. by turnpike and W. by Vincent's land; 40 a. b'd N. 12 c. 17 l. by turnpike, E. by Vincent's land, S. by lot line and W. by line par'l to E. line, and ex. 118 a. N. W. Cor.....	$100\frac{23}{100}$
Mooers:	
195. W. $\frac{1}{2}$	210
197. W. $\frac{1}{2}$ of S. W. $\frac{1}{4}$	$52\frac{1}{2}$
197. B'd N. by P. Stafford, E. by W. Brisben, S. by J. Tallman and W. by E. White.....	$52\frac{1}{2}$
203. E. P't, b'd W. by Keillis.....	100
204. S. E. cor.....	12
210. N. W. $\frac{1}{4}$ and W. $\frac{1}{2}$ of S. W. $\frac{1}{4}$	157
Altona:	
223. N. P't of S. E. $\frac{1}{4}$	51
225. All in Altona.....	225
Dannemora:	
225. All in Dannemora.....	195
229. S. E. cor., 33 a. and S. W. cor. 33 a.....	66
Plattsburgh:	
241. Ex. $57\frac{1}{2}$ a. E. $\frac{1}{2}$ of S. E. $\frac{1}{4}$	$367\frac{1}{2}$
Plattsburgh and Schuyler Falls:	
250. E. P't of W. $\frac{1}{2}$	83
Plattsburgh:	
252. Sub. 8.....	$11\frac{1}{2}$
252. Sub. 9.....	$12\frac{3}{4}$

ESSEX COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres 133,447,917.

DETAILED STATEMENT.

ESSEX TRACT.

Henry's Survey.

Town and lot.	Area in acres.
Keene :	
128. N. P't Taylor mill lot.	1
228.	102
531.	200

Gore between Thurman's Road Patent and Hoffman Township.

Schroon :	
3.	92

Hoffman Township.

A.	200
B.	200
D. E. P't, in Schroon, 100 a. ex. 50 a. being so much of 55 a. N. P't of lot as is contained therein,	50
E. E. P't, in Schroon...	50

Minerva :	
E. W. P't, in Minerva.....	150

Schroon :	
F.	250
1. S. W. $\frac{1}{4}$	62 $\frac{1}{2}$
5. Ex. und. $\frac{1}{2}$ paid by Finch, Pruyn & Co.....	125
6.	250
7.	250
8.	250
9. S. W. cor., 89 a. ex. 79 a. S. W. cor. thereof..	10
14.	250
15. N. W. $\frac{1}{4}$	62 $\frac{1}{2}$

Town and lot.	Area in acres.
16. Ex. S. E. $\frac{1}{4}$	185
18.	250
20.	250
28. S. $\frac{1}{2}$	125
29.	250
43.	250
66. W. P't.....	90
74. W. $\frac{1}{2}$ and 75 a. N. P't of E. $\frac{1}{2}$	200
75.	250

Minerva:

94. Ex. 90 a. W. P't and 125 a. S. E. cor. b'd W. by 90 a. W. P't of lot.....	35
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IRON ORE TRACT.

Elizabethtown:

142.	63
213. N. end.....	140

JAY TRACT

Wilmington:

5. E. or E'ly Pt.....	118
6.	300
25.	200
32. Ex. 200 a. N. P't.....	150
51. N. end.....	140

Maul's Patent.

Chesterfield:

30. All in Chesterfield.....	75
45. Same.....	100
46. Same.....	100
47. Same.....	75
50. N. $\frac{1}{2}$	100
56.	200

Morgan's (Jonas) Patent of 4,800 a.

Westport:

16. Bonded when sold to State.....	100
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NORTH RIVER HEAD TRACT.

North Hudson:

13.	160
14.	160
22.	160
23.	160
46.	160

Elizabethtown:

83. N. $\frac{1}{2}$, in Elizabethtown.....	80
84. Same.....	80

North River Head Tract — continued.

Town and lot. Area in acres.

North Hudson :

84. S. $\frac{1}{2}$, in North Hudson..... 80

Elizabethtown :

98. Ex. N. W. $\frac{1}{4}$ 120
 103. 160
 104. 160
 110. 160
 126. 160
 128 and 129. Being the bed of the Boquet river, and
 land b'd beg. 3 f't E'ly from a black cherry tree
 in the highway fence nearly opposite the dwelling-
 house of Elisha Holcomb, th. N. 11° E. 3 r. and 17 l.
 to E. bank of said river, th. down said river on its
 E. bank N. $65^{\circ} 30'$ E. 20 r. to the top of the lower
 falls, th. continuing on said E. bank N. 50° E. 42
 r. to S. line of lot 2 Roaring Brook tract, th. W.
 on said S. line 17 r. and 15 l., th. S. 50° W. 29 r.,
 th. S. $65^{\circ} 30'$ W. 12 r., th. N. 73° W. 16 r., th. 17°
 W. 12 r. to a point 4 r. up stream (on E. bank
 of said river) from the top of the upper or Split
 Rock Forge Falls, th. S. 50° E. 16 r. to a large rock
 near the west wheel track of the State road and th.
 85° E. 10 r. to beg. 6

OLD MILITARY TRACT.

Township 1, Thorn's Survey.

Elizabethtown :

16. S. W. $\frac{1}{4}$ 40

Lewis :

44. Bonded October 18, 1847..... 160
 50. Ex. und. $\frac{3}{4}$ paid by Albany and Rensselaer Iron
 & Steel Co..... $38\frac{1}{2}$

Elizabethtown :

55. W. $\frac{2}{3}$, in Elizabethtown..... 106
 79. 160
 81. 160

Keene :

88. 160
 115. 102

Townships 1 and 2, Richard's Survey.

Wilmington :

13. 64
 14. N. W. cor..... 57
 15. 315
 50. N. P't, in Wilmington..... 187

Township 1, etc. — continued.

Town and lot.	Area in acres.
51. All in Wilmington.....	205
52. N. P't, in Wilmington.....	254
54. Ex. E. $\frac{1}{3}$ of W. $\frac{1}{2}$	835
56.	382

Keene :

65.	700
69.	760
93.	350

Township 11.

St. Armand :

1.	120
6.	160

North Elba :

15.	160
20.	160

St. Armand :

22.	160
26.	160
28. Ex. 110 a. N. W. cor	50

North Elba :

34.	160
35.	160
38.	160
39.	160
40.	160

St. Armand :

41. W. P't	103
42.	160
43.	160
45. S. W. $\frac{1}{4}$	40
50.	160

North Elba :

55. N. $\frac{1}{2}$	80
58.	160
59.	160
60.	160

St. Armand :

69.	160
70. Ex. S. W. $\frac{1}{4}$	120
71.	160

North Elba :

72.	160
73.	160

Township 11, O. M. T. — continued.

Town and lot.	Area in acres.
74.	160
77.	160
78. Ex. S. W. $\frac{1}{4}$	120
79.	160
80.	160
81.	160
St. Armand :	
86. S. P't	120
88.	160
90.	160
91.	160
North Elba :	
93.	160
98. Ex. N. W. $\frac{1}{4}$	120
99.	160
100.	160
St. Armand :	
107.	160
108.	160
109.	160
110.	160
North Elba :	
115. Ex. N. W. $\frac{1}{4}$	120
117.	200
118.	160
120.	160
St. Armand :	
122.	160
124.	160
125.	160
127.	160
128.	160
129.	160
130.	160
North Elba :	
133.	160
134.	160
135.	160
136. Ex. N. W. $\frac{1}{4}$	90
137. N. W. $\frac{1}{4}$	50
139. Ex. N. E. $\frac{1}{4}$ and S. W. $\frac{1}{4}$	80
140.	160

Township 11, O. M. T. — continued.

Town and lot.	Area in acres.
St. Armand :	
144.	160
145.	160
146.	160
147.	160
148.	160
149.	160
150.	160
North Elba :	
154.	160
155.	160
156. N. W. cor.....	70
157.	200
159. N. $\frac{1}{2}$	80
160. Ex. S. E. $\frac{1}{4}$	120
St. Armand :	
164.	200
165.	200
166.	200
167.	200
168.	200
169. Ex. S. E. $\frac{1}{4}$	150
North Elba :	
174. Ex. 70 a. N. W. cor.....	90
175. Ex. N. E. $\frac{1}{4}$	120
176.	120
178.	200
179.	130
180. Ex. S. E. $\frac{1}{4}$	120
St. Armand :	
181. W. side.....	100
182.	300
184.	300
185. Ex. N. E. $\frac{1}{4}$	225
186.	300
187.	160
188.	160
North Elba :	
193.	160
195.	160
196. Ex. S. W. $\frac{1}{4}$	90
197.	200
198. Ex. S. W. $\frac{1}{4}$ and und. $\frac{2}{3}$ of S. E. $\frac{1}{4}$ paid by Amanda Lyon	113 $\frac{3}{4}$
199. Ex. N. W. $\frac{1}{4}$	150
200.	160

Township 11, O. M. T. — continued.

Town and lot.	Area in acres.
St. Armand:	
203.	160
204.	160
205.	160
206.	160
207.	160
208.	160
209.	160
211.	160
North Elba:	
213.	160
215.	160
218. Ex. und. $\frac{2}{3}$ of N. E. $\frac{1}{4}$ and und. $\frac{2}{3}$ of S. W. $\frac{1}{4}$, paid by O. Able, Jr.	106 $\frac{2}{3}$
St. Armand:	
223.	160
224. Ex. N. E. $\frac{1}{4}$	120
225.	160
226.	160
227.	160
228.	160
230.	160
231.	160
North Elba:	
232.	160
233.	160
234. Ex. S. E. $\frac{1}{4}$	120
St. Armand:	
241.	120
242.	160
243.	160
244.	160
245.	160
246.	160
247.	160
248.	160
249.	160
250.	160
251.	160
North Elba:	
252.	160
253. N. E. $\frac{1}{4}$	40
St. Armand:	
262.	160
263.	160

Township 11, O. M. T. — continued.

Town and lot.	Area in acres.
264. Ex. S. E. $\frac{1}{4}$	120
265.	160
266.	160
267.	160
269. Ex. 100 a. N. W. cor.	60
270.	160
271.	160
North Elba :	
275.	160
St. Armand :	
282.	160
283.	160
284.	160
285.	160
286.	160
287.	160
288.	160
289.	160
290.	160
291.	160
303.	120
304.	120
305.	120
306.	120
307.	120
308.	120
309.	120
310.	120
North Elba :	
317.	200
318.	160
St. Armand :	
321.	120
322.	160
323.	160
325. Ex. N. E. $\frac{1}{4}$	120
326.	160
327.	160
328.	160
329.	160
330.	160
North Elba :	
333.	40
347. Ex. N. E. $\frac{1}{4}$	150
338.	160

Township 11, O. M. T. — continued.

Town and lot.	Area in acres
St. Armand :	
347.	160
350.	160
North Elba :	
354.	160
355.	160
357.	200
358.	160
359. S. E. $\frac{1}{4}$	40
360. N. $\frac{1}{2}$	80

TOWNSHIP 12.

Richards' Survey.

1. Sub. 3.	155. ⁸ / ₁₀
2. Sub. 3.	160
3.	1440
4.	835
5.	620
6. N. $\frac{1}{2}$	720
7. Sub. 1.	160
7. Sub. 2.	160
10. Sub. 1.	187
10. Sub. 2.	152
13.	620
17. Sub. 2.	155
17. Sub. 3. N. E. $\frac{1}{4}$	38 ³ / ₄
22. Ex. 700 a. S. P't.	740
23. Sub. 1	160
23. Sub. 2 . Ex. S. E. $\frac{1}{4}$	120
23. Sub. 3	188
23. Sub. 4	188
24. Sub. 1 N. E. $\frac{1}{4}$ and S. W. $\frac{1}{4}$	83 $\frac{1}{2}$
24. Sub. 2	167
24. Sub. 3	150
24. Sub. 4, N. W. $\frac{1}{4}$	37 $\frac{1}{2}$
30.	1440
31.	640
32. S. $\frac{1}{2}$	320
33. Ex. N. E. $\frac{1}{4}$ of N. E. $\frac{1}{4}$ and N. E. $\frac{1}{4}$ of S. E. $\frac{1}{4}$	560
34.	640
35.	1440
37.	861
38.	1449
39.	640
40.	614
41.	539
43.	1278

Township 12, O. M. T. — continued.

Town and lot.

Area in acres.

Thorn's Survey.

1.	Ex. S. E. $\frac{1}{4}$	120
2.	.....	160
3.	.....	160
4.	Ex. S. E. $\frac{1}{4}$	120
5.	Same.....	120
6.	Same.....	120
7.	.....	160
8.	.....	160
9.	.....	160
10.	.....	160
11.	N. W. $\frac{1}{4}$ and S. E. $\frac{1}{4}$	80
12.	.....	160
14.	.....	160
15.	Ex. N. W. $\frac{1}{4}$	120
16.	.....	160
17.	.....	160
18.	.....	160
19.	.....	160
20.	.....	160
21.	Ex. N. E. $\frac{1}{4}$	120
22.	N. $\frac{1}{2}$	80
23.	N. W. $\frac{1}{4}$ and S. E. $\frac{1}{4}$	80
24.	Ex. S. E. $\frac{1}{4}$	120
25.	.....	160
26.	.....	160
27.	.....	160
28.	Ex. N. E. $\frac{1}{4}$	120
29.	.....	160
30.	.....	160
31.	S. $\frac{1}{2}$	80
32.	.....	160
33.	.....	160
34.	.....	160
35.	Ex. N. W. $\frac{1}{4}$	120
36.	.....	160
37.	.....	160
40.	.....	160
41.	.....	160
42.	Ex. N. W. $\frac{1}{4}$	120
43.	.....	160
47.	.....	160
48.	N. E. $\frac{1}{4}$	40
49.	Ex. S. W. $\frac{1}{4}$	120
50.	.....	160
53.	.....	160
54.	Ex. S. E. $\frac{1}{4}$	120

Township 12, O. M. T. — continued.

Town and lot.	Area in acres.
56. S. W. $\frac{1}{4}$	40
57.	160
59. N. $\frac{1}{2}$	80
60. N. W. $\frac{1}{4}$	40
61.	160
62. Ex. S. E. $\frac{1}{4}$	120
63. Ex. N. W. $\frac{1}{4}$	120
64.	160
65.	160
67. Ex. N. W. $\frac{1}{4}$	120
69. Ex. S. W. $\frac{1}{4}$	120
70.	160
83. Ex. S. W. $\frac{1}{4}$	120
84. Same.....	120
90.	160
91.	160
96.	160
98.	160
101. Starch mill, b'd beg. in the west branch of the Ausable River 30 ft. below Fenout & Thompson's saw-mill, th. N. E'ly 40 ft. to a large rock, th. S. E'ly 60 ft., th. S. W'ly 40 ft. and th. N. W'ly 60 ft. to beg.....	ft. 2400
	acres.
115. N. E. $\frac{1}{4}$	40
121. Ex. N. W. $\frac{1}{4}$	120
123.	160
126.	160
129.	160
130.	160
131.	160
132. Ex. S. E. $\frac{1}{4}$	120
134. N. W. $\frac{1}{4}$ and S. E. $\frac{1}{4}$	80
135.	160
136.	160
137. Ex. N. E. $\frac{1}{4}$	120
138. N. E. $\frac{1}{4}$ and S. W. $\frac{1}{4}$	80
139. W. end of N. $\frac{1}{2}$	20
141. Ex. S. E. $\frac{1}{4}$	120
142. W. $\frac{1}{2}$	80
146. N. $\frac{1}{2}$ and S. E. $\frac{1}{4}$	120
147.	160
148. Ex. S. W. $\frac{1}{4}$	120
149.	160
153.	160
154.	160

PARADOX TRACT.

Town and lot. Area in acres.

Ticonderoga :

24.	100
39.	100

Schroon :

85. Ex. und. $\frac{1}{2}$ paid by Roth.....	80
88. Ex. 25 a. N. W. cor.....	135
89.	160
95.	160
135.	200

North Hudson :

172. Ex. und. $\frac{1}{2}$ assessed to Crown Point Iron Co....	80
174.	160
184.	160
185.	160
217.	160
224.	160
230.	160
239. N. P't.....	53
239. Ex. und. $\frac{2}{3}$ assessed in 1868 to Crown Point Iron Co., and in 1870 to Jas. E. Pond.....	54

Moriah :

292.	160
293. Ex. 80 a. N. W. cor....	80
294.	160
295. W. side 110 a., ex. und. $\frac{2}{3}$ thereof Adirondack Co.'s land.....	36 $\frac{2}{3}$
314.	160
315.	160

North Hudson :

350.	160
353.	160
354.	100
358. N. side.....	70
402. N. W. cor., square.....	70

Moriah :

412.	160
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North Hudson :

413.	160
427. N. W. cor.....	49

PERU BAY TRACT.

Chesterfield :

113.	459 $\frac{7}{10}$
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ROARING BROOK TRACT.

Town and lot.	Area in acres.
Elizabethtown :	
2.	243
5. E. P't in Elizabethtown.....	100
Keene :	
5. W. P't in Keene.....	150
11.	240
12.	240
14.	240
15.	240
Elizabethtown :	
16. E. P't in Elizabethtown.....	100
Keene :	
16. W. P't in Keene.....	150
Elizabethtown :	
26.	300
28. E. P't in Elizabethtown.....	100
Keene :	
28. W. P't in Keene	160
29.	300
30.	300
31.	160
32.	160
39.	300
41.	160
Elizabethtown :	
42. E. P't in Elizabethtown.....	100
Keene :	
42. W. P't in Keene.....	150
Elizabethtown :	
48. E. ¹ or E. P't in Elizabethtown.....	150
Keene :	
48. W. $\frac{1}{2}$	150
50.	300
51.	300
52.	160
57. Ex. und. $\frac{1}{3}$ paid by O. Abel, Jr. and und. $\frac{1}{3}$ paid by Henry Glidden.....	100
58. Same.....	100
59. Same.....	100
65. W. P't or W. $\frac{1}{2}$ in Keene.....	150
66. Ex. und $\frac{1}{3}$ paid by O. Abel, Jr. and und. $\frac{1}{3}$ paid by Henry Glidden.....	100

SOUTH TRACT.

Stower's Survey.

Town and lot.	Area in acres.
Lewis :	
12. E. end.....	22
27.	235
31.	244
Jay :	
33.	160

Stoughton's Patent.

Ticonderoga :

35.	$\frac{1}{4}$
36.	$\frac{1}{4}$
37.	$\frac{1}{4}$
38.	$\frac{1}{4}$
39.	$\frac{1}{4}$
66.	$\frac{1}{4}$

TOTTEN AND CROSSFIELD'S PURCHASE.

*Township 14.*N. $\frac{1}{2}$ and S. E. $\frac{1}{4}$.

Minerva :

9.	220
10. S. $\frac{1}{2}$	110
11.	160
12.	240
14.	160
20. All in Essex Co.....	131
29. Same.....	80
30. N. E. $\frac{1}{4}$	40
32.	160
33.	160
34. W. $\frac{1}{2}$	80
38.	160
40.	160
41. S. P't.....	15
42. E. P't.....	140
57. E. $\frac{1}{2}$	80
58.	160
59.	160
75. S. E. P't 56 a. and W. P't 106 a. ex. 56 a. being so much of 60 a. N. P't of lot as is contained therein	106
82.	160
86. All in Essex Co.....	100

Township 16.

Town and lot.	Area in acres
13.	1000
14.	1000
15.	1000
16. N. W. $\frac{1}{4}$	250
17. Same.....	250
20.	1000
22. Ex. 100 a. N. end and 100 a. S. end.....	800
23. Same.....	800
24. E. $\frac{1}{2}$	500

Township 25, Bailey's Patent.

2. E. end.....	70
8.	98
9.	98
11.	100
15.	100
17.	100
37. W. $\frac{1}{2}$	50
54. N. $\frac{1}{2}$	50
74.	100
75.	100
79.	100

Dominick's Patent.

52. N. E. cor. 50 a. and S. W. cor. 50 a.....	100
53. N. $\frac{1}{2}$	100
58. S. $\frac{1}{2}$	100

Thorn's Survey.

1.	114
5.	136
15. Ex. 70 a. N. W. cor.....	90
23.	160
24.	160

Township 26.

18.	200
20.	200
21.	200
25.	192
26. W. P't.....	84
28.	160
29.	160
30. Ex. 100 a. N'ly end.....	100
35.	160

Township 26, etc. — continued.

Town and lot.	Area in acres.
43.	200
48.	240
52. Ex. 33 a. N. E. cor., 15 c. wide N. and S. and 22 c. long E. and W.	167
53. W. $\frac{1}{2}$ ex. 21 a. N. W. cor., 15 c. long N. and S. and 14 c. wide E. and W.	79
57.	200
58.	200
62. ..	200
66.	200
67.	200
68.	200
74.	244
78.	244
81.	244
82. S. $\frac{1}{2}$	122
84.	266
89. Ex. 80 a. on W'ly line 19 c. from S. W. cor., 20 c. wide N. and S. 40 c. long E. and W.	156
92.	236
93.	236
94.	236
98.	236
99. ..	236
101.	236
102. Ex. 100 a. N. P't and 50 a. N. W. cor. of rem.	86
103. N. end 50 a. and all of 43 a. S. E. cor. covered by 200 a. W. P't or 200 a. N. W. P't and is not covered by $6\frac{3}{10}$ a. S. E. cor., 21 c. long N. and S. and 3 c. wide E. and W. 34 a.	84
104. E. P't 122 a. ex. 7 a. being so much thereof as is included in $41\frac{7}{10}$ a. S. W. cor. of lot 21 c. wide N. and S., 31 c. long on N. line and 8 c. on S. line, b'd E. by lake, and 2 a. S. E. cor. thereof, 5 c. on E. and 6 c. on S. line, b'd N. W. by lake.	113
109. Ex. 100 a. b'd beg. 11 c. S. of N. W. cor., th. N. 59° E. 42 c. to E'ly line of lot, th. S. 31° E. 24 c., th. S. 59° W. 42 c., across the lot to the W'ly line thereof and th. N. 31° W. 24 c. to beg.	136
114. W. $\frac{1}{2}$	118
117. N. P't (Geo. W. Gilletts)	80
118. N. P't, 30 a., S. P't, 126 a., and N. W. cor., square of 58 a. remaining after ex. 60 a. N. P't and 118 a. S. P't of lot, 15 a.	171

Township 27, Richard's Survey.

Town and lot.	Area in acres.
Newcomb :	
6.	233
7.	250
14.	160
15.	160
21.	160
22.	160
23.	160
25.	160
26.	160
27.	160
28.	160
36. N. E. cor.	70
37.	250

Thorn's Survey.

16.	80
17. Ex. 55 a. N. W. cor.	25
18.	80
19.	80
23.	160
24.	160
33.	160
35.	160
36.	160
42.	160
43.	160
44.	160
45.	160
46.	160
47.	160
48.	160
49.	160
51.	160
52.	160
53.	160
54.	160
55.	160
56.	160
57.	160
58.	160
59.	160
61.	160
62.	160
63.	160
64.	160
65.	160

Township 27, etc. — continued.

Town and lot.	Area in acres.
66.	160
67.	160
68.	160
69.	160

Township 30.

Minerva:

1. E. $\frac{1}{2}$ and 200 a. N. P't and 100 a. S. P't of W. $\frac{1}{2}$.	800
2.	1000
5.	1000
6. All in Minerva.	975

North Hudson:

6. All in North Hudson.	25
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Minerva:

7. All in Minerva.	750
8. All in Minerva.	400
9. All in Minerva.	25

North Hudson:

9. All in North Hudson.	975
10. Ex. 200 a. assessed to Dudley or David Durgin, b'd beg. at a hemlock stake standing S. 30° E. 50 c. from N. E. cor. of lot, th. S. 60° W. 40 c. to a cor. in the Dudley Pond, th. S. 30° E. 50 c. to a birch tree for a corner, th. N. 60° E. 40 c. to a spruce tree on E'ly line of lot and th. N. 30° W. 50 c. to beg.	800
11.	1000
12.	1000
13. Ex. 100 a. S. end or S. E. P't.	900

Minerva:

15. All in Minerva.	250
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North Hudson:

15. All in North Hudson.	650
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Minerva:

16. All in Minerva.	550
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North Hudson:

16. All in North Hudson.	425
17. All in North Hudson. ..	300

Minerva:

18. All in Minerva.	700
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North Hudson:

18. All in North Hudson.	250
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Township 30 — continued.

Town and lot.	Area in acres
Minerva :	
19. All in Minerva.	800
North Hudson :	
19. All in North Hudson.	150
Minerva :	
20. All in Minerva.	900
North Hudson :	
20. All in North Hudson.	100
Minerva :	
21. All in Minerva.....	955
North Hudson :	
21. All in North Hudson	50
Minerva :	
22.	1000
23.	1000
24. Ex. 200 a. b'd N. by Van Dusen's Creek, E'ly and W'ly by lot lines and S'ly by line at right angles to E'ly and W'ly lane	800

Township 50.

Newcomb :	
87.	160
92.	160
95.	160
96.	160
97.	160
98 and 99	173
103.	180
104.	180
105.	180
106.	180
108.	183
109.	166
110.	160
111.	236
112.	236
115 and 116.....	299
117.	236
118.	236
119.	236
120.	236
121.	160

Town and lot.

Area in acres.

TRACT WEST OF ROAD PATENT.

North Hudson :

4.	160
5.	160
10.	160
11.	160
27. Ex. und. $\frac{1}{2}$ R. R. lands	80
28. Same	80
29. Same	80
35.	160
43.	160
47.	160

Schroon :

65.	127
67.	160
113. Ex. und. $\frac{1}{2}$ paid by R. Seaman	63

Minerva :

168. All in Minerva	60
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Schroon :

168. E. P't in Schroon	60
178.	$\frac{53}{100}$

WHITE FACE MOUNTAIN TRACT.

North Elba :

1. Ex. und. $\frac{1}{2}$ paid by Eliza A. Carter	749
2. All in North Elba, ex. und. $\frac{1}{2}$ thereof paid by Eliza A. Carter	400

Wilmington :

2. N. P't in Wilmington, ex. und. $\frac{1}{2}$ thereof paid by Eliza A. Carter	$241\frac{1}{2}$
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North Elba :

5. All in North Elba, ex. und. $\frac{1}{2}$ thereof paid by Eliza A. Carter	$765\frac{1}{2}$
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Wilmington :

5. N. P't in Wilmington, ex. und. $\frac{1}{2}$ thereof paid by Eliza A. Carter	300
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FRANKLIN COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 150,179.176.

DETAILED STATEMENT.

GORE EAST OF TOWNSHIP 9, OLD MILITARY TRACT.

Town and lot.	Area in acres.
Bellmont :	
8.	160
28.	160

MACOMB'S PURCHASE, GREAT TRACT 1.

Township 8.

Brandon :	
22. S. $\frac{1}{2}$ of S. E. $\frac{1}{4}$	25
45. B'd N. by land of A. Campbell, E. by Hinman and Harmon's land, S. by L. Brown's land and W. by lot line.....	15

Township 11.

2. Sub. 2.....	69
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Township 12.

Duane :	
3. N. E. cor.....	100
4. Same.....	98
6. N. E. corner 142 a. and S. W. cor. 200.....	342
7. All E. of Highway, ex. 77 a. b'd N. and E. by land of J. B. or John Duane and S. by Har- riet Duane's land and 41 a. b'd beg. at S. W. cor. of the Conley lot, th. E. 22 c., th. S. 17 c. 15 l. to S. line of lot, th. W. on lot line to middle of Malone Road, th. N. on said road to beg..	415
8.	556
10.	636

Township 12 — continued.

Town and lot	Area in acres
13.	617
16.	640
17.	650
19. N. of Turnpike, b'd N. and E. by G. W. or Mary Olmstead's land, S. by Port Kent and Hopkin- ton Turnpike and W. by G. W. McNeil's land..	20
19. All S. of Turnpike, ex. 180 a. b'd beg. in the center of the Port Kent or Port Kent and Hopkinton Turnpike at a point $82^{\circ}\frac{1}{2}$ E. 11 c. 35 l. from the intersection of said road with the W. line of lot, th. S. 40 c. th. E. 43 c. to the W. bank of the outlet of Horse Shoe Pond, th. N. along said bank, as it winds and turns, to the center of said Port Kent or Port Kent and Hopkin- ton Turnpike, and th. W'ly along center of said Turnpike 55 c. to beg.	202
21. Sub. 2.	100
21. Sub. 3.	100
21. Sub. 5, N. W. Cor.	62
21. Sub. 6, W. $\frac{1}{2}$	50
22. Sub. 1.	96
24. Ex. 200 a. W. side.	247
25. Sub. 3.	100
26.	679
29. S. $\frac{1}{2}$	328
30. Ex. 50 a. N. E. cor. and 50 a, N. W. cor.	493
31. E. centre P't b'd N. by land of J. Sheffield, E. by lot line, S. by land of S. Kempton and W. by Malone Road.	40
31. S. W. cor.	175
33.	595
34.	685
35. W. $\frac{1}{2}$	338
36. Ex. 100 a. S. W. cor. O. H. Booth, Poughkeep- sie, N. Y.	584
37.	630
42.	641
43. Ex. 76 a. N. E. cor. and 15 a. being so much of 91 a. more or less, N. E. P't, 37 c. 34 l. on N. 25 c. 37 l. on E. 35 c. 60 l. on S. and about 24 c. 57 l. on W. as is not contained in said 76 a.	552
46.	610
47.	652
48. Ex. 100 a. N. W. Cor.	463
50.	483
54.	501
55.	443
56.	468

Township 14.

South $\frac{1}{2}$ and North East $\frac{1}{4}$

Town and lot.

Area in acres.

Brandon :

8. N. of $\frac{1}{2}$ S. $\frac{1}{2}$	40 $\frac{1}{4}$
11. Same.....	33
13. N. $\frac{3}{4}$	101 $\frac{1}{4}$
14. N. $\frac{2}{3}$ of S. $\frac{3}{4}$	76
15. S. $\frac{1}{2}$	73
16. S. $\frac{2}{3}$ of N. $\frac{3}{5}$	70 $\frac{2}{5}$
17. S. $\frac{2}{3}$	82 $\frac{2}{3}$
18. N. W. $\frac{1}{4}$ and S. $\frac{1}{2}$ of S. E. $\frac{1}{4}$	97 $\frac{1}{2}$
19.	169
20. N. $\frac{1}{5}$ S. $\frac{1}{5}$ and N. $\frac{1}{3}$ of S. $\frac{3}{5}$	106 $\frac{4}{5}$
23. N. $\frac{1}{4}$	36
24. N. $\frac{1}{4}$ of E. $\frac{1}{2}$ and N. $\frac{1}{2}$ of S. W. $\frac{1}{4}$	72
25. Ex. N. $\frac{1}{4}$ and S. $\frac{1}{4}$	65 $\frac{1}{2}$
27. N. $\frac{1}{2}$ of S. $\frac{1}{2}$	39
28. S. $\frac{1}{5}$ and N. $\frac{1}{3}$ of S. $\frac{3}{5}$	68 $\frac{4}{5}$
29. N. $\frac{1}{3}$	40
34. S. $\frac{2}{5}$	78
35. Ex. N. $\frac{1}{4}$ and S. $\frac{1}{4}$	69 $\frac{1}{2}$
38. S. $\frac{1}{2}$ of N. $\frac{2}{5}$	39 $\frac{2}{5}$
41.	178
42. N. $\frac{2}{5}$	69 $\frac{1}{5}$
45. N. $\frac{1}{2}$ of S. $\frac{1}{2}$	41 $\frac{3}{4}$
46. N. $\frac{1}{4}$ and S. $\frac{1}{2}$	123 $\frac{3}{4}$
47. Ex. N. $\frac{1}{3}$ and S. $\frac{1}{3}$	43
48. N. $\frac{2}{3}$ of W. $\frac{1}{2}$	78
51. N. $\frac{3}{5}$ and S. $\frac{1}{5}$	148
52. N. $\frac{3}{5}$	109 $\frac{1}{5}$
54. S. $\frac{1}{2}$ of N. $\frac{2}{5}$	37 $\frac{4}{5}$
55. N. $\frac{2}{5}$ and N. $\frac{1}{2}$ of S. $\frac{2}{5}$	111
57. N. $\frac{1}{5}$ and S. $\frac{3}{5}$	156 $\frac{4}{5}$
58. N. $\frac{2}{3}$ of S. $\frac{3}{5}$	76 $\frac{2}{5}$
59. S. $\frac{1}{3}$	43
61. N. $\frac{1}{4}$ and N. $\frac{1}{2}$ of S. $\frac{1}{2}$	83
62. N. $\frac{1}{5}$	35 $\frac{4}{5}$
64. S. $\frac{1}{5}$ and S. $\frac{1}{2}$ of N. $\frac{2}{5}$	70
66. Ex. N. $\frac{1}{5}$ and S. $\frac{1}{5}$	108
68. N. $\frac{1}{5}$ and N. $\frac{1}{3}$ of S. $\frac{3}{5}$	73 $\frac{1}{5}$
69. N. $\frac{1}{2}$ of S. $\frac{2}{5}$ and S. $\frac{1}{2}$ of N. $\frac{2}{5}$	78
70. N. $\frac{1}{5}$	36 $\frac{4}{5}$
71. N. $\frac{1}{2}$	67
72. S. $\frac{1}{5}$ and N. $\frac{1}{3}$ of S. $\frac{3}{5}$	84 $\frac{2}{5}$
73. N. $\frac{3}{4}$	125 $\frac{1}{4}$
77. N. $\frac{1}{5}$ and N. $\frac{1}{2}$ of S. $\frac{2}{5}$	73 $\frac{1}{5}$
78. N. $\frac{1}{2}$ of S. $\frac{2}{5}$	37 $\frac{2}{5}$
81. N. $\frac{1}{5}$	37 $\frac{2}{5}$

Township 14 --- continued.

Town and lot.	Area in acres.
82. S. $\frac{1}{5}$	36 $\frac{4}{5}$
84. N. $\frac{1}{2}$ of S. $\frac{2}{5}$, and S. $\frac{1}{2}$ of N. $\frac{2}{5}$	78
86. N. $\frac{1}{2}$ and S. $\frac{1}{4}$	126
90. N. $\frac{1}{2}$ of S. $\frac{1}{2}$	42 $\frac{1}{4}$
92. N. $\frac{1}{4}$ and S. $\frac{1}{2}$	129
96. N. $\frac{1}{4}$	41
99. N. E. $\frac{1}{4}$	37
100. S. $\frac{1}{4}$	37 $\frac{1}{4}$
101. N. $\frac{1}{4}$	39
103. S. $\frac{3}{4}$	120
104.	178
106. N. $\frac{1}{5}$ and S. $\frac{2}{5}$	109 $\frac{1}{5}$
107.	128

Township 15.

North East $\frac{1}{4}$.

Duane:

1.	469
2.	469
3.	469
4. Ex. 345 a. E. P't	124
5.	469
7.	469
8.	469
9.	469
10.	469
12.	469
13.	469
14.	469
15.	469
16. W. end	95

North West $\frac{1}{4}$

S. P't, 1987 a. Ex. 750 a. W. end thereof	1237
18.	166
25.	156

South West $\frac{1}{4}$.

Brighton:

4.	100
5.	100
6.	100
7.	100
8.	100
9.	100
10.	100
14.	100
15.	100
16.	100

Township 15 — continued.

Town and lot.	Area in acres.
17.	100
18.	100
19.	100
20.	100
24.	100
25.	100
26.	100
27.	100
33.	100
36.	100
37.	100
38.	100
40.	100
46.	100
47.	100
48.	100
49.	100
51.	100
52.	100
53.	100
55.	100
56.	100
57.	100
58.	100
59.	100
60.	100
61.	100
62.	100
63.	100
65. E. $\frac{1}{2}$ or E. P't.	50
66.	100
67.	100
68.	100
71.	100
72.	100
76.	100
77.	100
78.	100
79.	100
80.	100

Township 18.

1.	328
2.	328
4.	328
5.	328
6.	328

Township 18 — continued.

Town and lot.	Area in acres
7. Ex. und. $\frac{1}{4}$ paid by Albert Turner	246
8. Same	246
9. Ex. und. $\frac{1}{4}$ paid by Albert Turner and und. $\frac{1}{4}$ paid by Chauncey Turner	164
10. Same	164
11.	328
12.	328
13.	328
14.	328
16.	328
17. Ex. und. $\frac{1}{4}$ paid by Albert Turner and und. $\frac{1}{4}$ paid by Chauncey Turner	164
18. Same	164
19. Same	164
20. Same	164
21.	328
22.	328
23.	328
24.	328
25.	328
26.	328
27. Ex. und. $\frac{1}{4}$ paid by Albert Turner and und. $\frac{1}{4}$ paid by Chauncey Turner	164
28. Same	164
29. Same	164
30. Same	164
31.	328
32.	328
33.	328
34.	328
35.	328
36.	328
37. Ex. und. $\frac{1}{4}$ paid by Albert Turner and und. $\frac{1}{4}$ paid by Chauncey Turner	164
38. Same	164
39. Same	164
40. Same	164
41.	328
42.	328
43.	328
44.	328
45.	328
46. Ex. und. $\frac{1}{4}$ paid by Albert Turner and und. $\frac{1}{4}$ paid by Chauncey Turner	164
47.	164
48. Ex. und. $\frac{1}{4}$ paid by Albert Turner	246
49. Ex. 50 a. S. W. cor. 20 c. N. and S. and 25 c. E. and W. 278 a. ex. und. $\frac{1}{4}$ thereof paid by Albert	

Township 18 — continued.

Town and lot.	Area in acres.
Turner and und. $\frac{1}{4}$ thereof paid by Chauncey Turner	139
50. Ex. und. $\frac{1}{4}$ paid by Albert Turner and und. $\frac{1}{4}$ paid by Chauncey Turner	164
56.	328
57.	328
58. W. P't	243
66.	328
67.	328
68. W. P't	243
76. S. W. cor. 27 c. N. and S. and 35 c. E. and W..	94
77. S. W. cor. or S. W. P't 21 c. N. and S. and 36 c. E. and W.	75
78. B'd N. and S. by lot lines, E. by land of Wm. Ricketson and W. by F. T. B. Weller's land .	105
87.	328
88. W. P't	243
97.	328

Township 20.

Brandon :

Whole. 30,650 a. ex. 320 a. S. $\frac{1}{2}$ of lot 10 and 320 a. S. $\frac{1}{2}$ of lot 15	30,010
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Township 23.

North $\frac{1}{2}$.

E. end	4379
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South East $\frac{1}{4}$.

N. end 6280 a. ex. 144 a. N. W. cor. thereof 80 c. long N. and S. by 18 c. wide E. and W.; 40 a. being Birch Island, in S'ly end of the Upper Saranac Lake, near and in a N'ly direction from Cory's Carry; 267 a. b'd beg. at a stake and stones N. 2° W. 24 r. from a large rock on N'ly bank of the outlet to Upper Saranac Lake and 2 r. and 10 ft. below the State Dam, called Norton's Dam, th. N. 80° E. 150 r. to a stake and stones standing 10 r. N. of the N. bank of said outlet, th. S. 10° E. 214 r. to a stake and stones on a high hill, th. S. 80° W. 200 r. to a stake and stones, th. N. 10° W. 214 r. and th. N. 80° E. 50 r. to beg.; 266 $\frac{17}{20}$ a. b'd beg. at a large rock on the S'ly shore of the Upper Saranac Lake, which rock is near the Indian Carry, nearly N. from Jesse Corry's "Rustic House," and S. from house on Birch Island, th. N. 34r., th. E. 114 r., th. S. 230 r., th. W. 194r., th. N. 200 r., and th. E. 80 r., to beg	5,595 $\frac{3}{20}$
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Township 24.

North East $\frac{1}{4}$.

Town and lot. Area in acres.

Harrietstown :

W. $\frac{1}{2}$	3,750
North West $\frac{1}{4}$.	
Whole	7,500
South East $\frac{1}{4}$.	
Whole	7,500
South West $\frac{1}{4}$.	
Whole	7,500

Township 25.

Waverly :

Und. $\frac{1}{3}$ of all that remains of N. $\frac{1}{3}$ of Town-
ship, after ex. 1295 a. E. P't thereof and 160
a. b'd beg. on E. shore of Big Tupper's Lake
at the mouth of Sucker Brook, th. S'ly along the
shore of said lake 40 c., th. E'ly 40 c., th. N'ly
40 c., and th. W'ly 40 c. to beg 2,399 $\frac{2}{3}$

Township 27, North West $\frac{1}{4}$.

Harrietstown :

B'd N. by 1961 a., N. end E. by N. E. $\frac{1}{4}$ S. by
Rackett River and Pond, or Ampersand Pond
or Lake, and the branch of Rackett River, and
W. by a line par'l to E. line, being the same
land conveyed by John and Thomas Appleby
Jr., to Thomas Lawrence, Sept. 25, 1839..... 1,000

OLD MILITARY TRACT.

Township 8.

Bellmont :

36. N. W. cor.....	200
55.	640
63. N. W. $\frac{1}{4}$	160
65.	640
66.	640
86. Ex. N. W. $\frac{1}{4}$	480
87. W. $\frac{1}{2}$	320

Township 9.

Franklin :

7. N. W. $\frac{1}{4}$	36 $\frac{7}{8}$
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Bellmont:

28.	152
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Township 9, O. M. T. — continued.

Town and lot.

Area in acres

Franklin :

30. N. $\frac{2}{3}$ of 114 a., W. P't..... 76

Bellmont :

45. 160

81. Ex. N. E. $\frac{1}{4}$ 12097. N. $\frac{1}{2}$ and S. E. $\frac{1}{4}$ 120

99. 160

Franklin :

102 Ex N. $\frac{1}{3}$ of W. 120 a..... 160

Bellmont :

127. 116 $\frac{1}{2}$

Franklin :

138. S. W. $\frac{1}{4}$ 50

147. 200

150. 180

Bellmont :

152. 160

171. 160

173. N. E. $\frac{1}{4}$ 40

Franklin :

174. 200

176. S. E. $\frac{1}{4}$ 40177. N. W. $\frac{1}{4}$ 41182. S. W. $\frac{1}{4}$ 40

184. Same 40

186. Ex. N. E. $\frac{1}{4}$ 135191. Ex. S. E. $\frac{1}{4}$ 120

206. Ex. 60 a., W. P't in Plumador Pond..... 100

213. S. E. $\frac{1}{4}$ 40

214. 200

225. Ex. N. W. $\frac{1}{4}$ 120

Bellmont :

228. 160

241. 160

Franklin :

242. 160

246. 200

249. S. E. $\frac{1}{4}$ 40

263. 160

Bellmont :

264. 160

Township 9, O. M. T. — continued.

Town and lot.	Area in acres.
Franklin :	
278. Ex. N. W. $\frac{1}{4}$	120
279.	160
283.	180
296.	160
Bellmont :	
300.	160
308. E. $\frac{1}{2}$ ex. 13 a., W. side thereof.....	67
310.	160
Franklin :	
315.	160
316. Ex. S. W. $\frac{1}{4}$	120
329.	160
331.	200
Bellmont :	
338. S. E. $\frac{1}{4}$	40
339. N. W. $\frac{1}{4}$	40
341. W. $\frac{1}{2}$	80
Franklin :	
350. Ex. 69 $\frac{1}{4}$ a., b'd beg. in S. W. cor. of lot, th. N. 20 c., th. N. 50°, E. 22 c. 33 l., th. S. 40°, E. 30. c., th. S. 50°. W. 8 c. 33 l. to S. line of lot and th. W. on S. line to beg.....	119 $\frac{15}{100}$
352.	182 $\frac{8}{10}$
353.	180
355.	200
356. Ex. S. W. $\frac{1}{4}$	127 $\frac{95}{100}$
357. N. E. $\frac{1}{4}$ and S. W. $\frac{1}{4}$	83 $\frac{9}{10}$
358.	200
359.	161 $\frac{4}{10}$

Township 10.

15.	200
16. Ex. S. $\frac{1}{2}$ of N. $\frac{2}{3}$ of E. $\frac{1}{2}$	166 $\frac{2}{3}$
17. Same.....	166 $\frac{2}{3}$
18.	200
19. Ex. 80 a. E. P't and 40 a. N. $\frac{1}{3}$ of W. 120 a....	80
22. S. P't.....	64
33.	200
34.	200
38.	200
84. S. W. cor.....	15
85.	168
87.	168

Township 10, O. M. T. — continued.

Town and lot.	Area in acres.
89.	168
90.	168
96.	168
106.	200
107.	200
112.	200
113.	200
114.	200
115.	200
126.	200
127.	200
128.	200
138.	200
141.	200
144. Ex. N. $\frac{1}{3}$ of 120 a. W. P't.	160
152.	200
166. Ex. 80 a. E. P't and 80 a. N. $\frac{2}{3}$ of 120 a. W. P't.	40
167.	200
168.	200
171.	200
179.	200
185.	200
186.	200
187.	200
188.	200
189.	200
190.	200
193.	200
198. Ex. S. E. $\frac{1}{4}$	150
199. W. $\frac{1}{2}$	100
200.	200
209.	200
210.	200
211.	200
213.	200
214.	200
215.	200
218.	200
219.	200
221.	200
222.	200
223. Ex. 80 a. E. P't known as Mill Lot.	120
224.	200
225.	200
226.	200
227.	200
228.	200

Township 10, O. M. T. — continued.

Town and lot.	Area in acres.
229.	200
230.	200
231.	200
232.	200
233.	200
250.	200
251.	200
252.	200
253.	200
254.	200
255.	200
256.	200
266.	200
267. Ex. N. W. $\frac{1}{4}$	150
268.	200
269.	200
270.	200
271. Ex. N. E. $\frac{1}{4}$	150
278. Ex. 40 a. S. $\frac{1}{2}$ of E. 80 a	160
280.	200
281.	200
285. Ex. N. W. $\frac{1}{4}$	150
287.	200
288. E. $\frac{1}{2}$	100
289.	200
290. S. $\frac{1}{3}$ of N. W. $\frac{1}{4}$, 16 $\frac{2}{3}$ a. and 43 $\frac{1}{3}$ a. being so much of the S. E. $\frac{1}{4}$, as is not contained in S. $\frac{1}{3}$ of W. 120 a.	60
292.	200
294.	200
295.	200
296.	200
307.	200
308.	200
309.	200
310.	200
311.	200
312.	200
313.	200
314.	200
316. Ex. 50 a. S. W. cor.	150
317. Ex. N. W. $\frac{1}{4}$	150
318.	200
319. S. $\frac{1}{2}$	100
324. Ex. S. E. $\frac{1}{4}$	150
325. Ex. 70 a. N. end	130
327.	200
328.	200

Township 10, O. M. T.— continued.

Town and lot.	Area in acres
329.	200
330.	200
331.	200
332.	200
333.	200
334.	200
335. Ex. S. E. $\frac{1}{4}$	150
349.	240
350.	240
351.	240
352.	240
353.	240
355.	240
356.	240
357.	240
358.	240
359.	240
360.	240

ST. REGIS RESERVATION.

Farm Lots.

Bombay :

	rods.
6. N. E. cor.	6

MILE SQUARE ON SALMON RIVER.

House Lots.

Fort Covington :

- 26.
- 27.
- 28.

FULTON COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres 15,248.874.

DETAILED STATEMENT.

CHASE'S PATENT.

Town and lot.	Area in acres.
Bleecker :	
8.	100
35. ..	100
37. E. P't.....	50
44. E. $\frac{1}{2}$..	50
48. Ex. 70 a. N. W. cor.....	30
53.	100
60.	100
61.	100
70. E. $\frac{1}{2}$	50
71.	100
72.	100
73.	100
74.	100
75.	100
77.	100
78.	100
79. N. W. P't in Bleecker.....	80
Mayfield :	
81. Chase's patent.....	100
83. All in Mayfield.....	65
Bleecker :	
83. N. W. P't in Bleecker.....	35
Mayfield :	
92. All in Mayfield.....	30
110. N. W. cor. 30 a. and S. W. cor. 15 a.....	45
111.	100
114.	100
115.	100
116. All in Mayfield.....	35

GLEN, BLEECKER & LANSING PATENT.

Town and lot.	Area in acres.
2. S. $\frac{1}{2}$ Subs. 1 and 2.....	250
3. Sub. 1.....	100
4. Sub. 3.....	99
4. Sub. 4.....	80
4. Sub. 5.....	119
4. Sub. 6.....	99
4. Sub. 7.....	99
6. Sub. 5, S. $\frac{1}{2}$	50
6. Sub. 7.....	100
6. Sub. 10.....	100
9. Sub. 5.....	94
9. Sub. 6.....	94
9. Sub. 7.....	113
Bleecker:	
14. Sub. 6.....	100
Mayfield:	
16. Sub. 8 E. $\frac{1}{2}$	50
17. Sub. 2.....	125
17. Sub. 3.....	125
17. Sub. 5.....	125
17. Sub. 6.....	125
17. Sub. 7.....	125
Bleecker:	
18. Ex. 200 a. N. side.....	550
21. Sub. 3, S. $\frac{1}{2}$	52
22. Sub. 1.....	100
25. Sub. 2, N. W. cor.....	35
34. Sub. 4.....	200
35. Ex. Sub's 1, 4, 5, 6, 7, 8, and 9, and W. $\frac{1}{2}$ of Sub's 2 and 3.....	383 $\frac{2}{3}$
41. Sub. 6.....	100
41. Sub. 7.....	100
41. Sub. 8.....	100
41. Sub. 10.....	100
Caroga:	
45. Sub. 4, E. $\frac{1}{2}$ or E. P't.....	50
51. Sub. 1.....	125
51. Sub. 2.....	125
51. Sub. 3.....	125
51. Sub. 5.....	125
51. Sub. 7.....	125
51. Sub. 8.....	125
52. Sub. 2.....	125
52. Sub. 3.....	100
52. Sub. 6.....	100
53. Sub. 7.....	125

Glen, etc., Patent — continued.

Town and lot.	Area in acres
53. Sub. 10	125
58. Sub. 8	100
59. Sub. 1	100
61. Sub. 4	100
62. S. E. cor. square, 90 a. and N. W. cor. 240 a. . .	330
62. Sub. 2	100
62. Sub. 3	100
62. Sub. 6	100
62. Sub. 7	100
62. Sub. 8	100
62. Sub. 9	100
62. Sub. 10.....	100
63. S. P't	300
68. Sub. 10	100

Stratford :

71. Sub. 1	100
71. Sub. 4	100
71. Sub. 5	100
82. E. P't.....355	} Ex. 60 a. S. E. cor. thereof
82. N. E. cor. 227 a. and S. E. cor. 288 a. 515	
83. Sub. 3. S. P't of N. $\frac{1}{2}$	30
83. Sub. 4, S. $\frac{1}{2}$	50
83. Sub. 5	100
83. Sub. 6, Ex. 90 a. N. P't	10
84. Sub. 2	100
84. Sub. 4	100
84. Sub. 5	100
85. Sub. 4	100
85. Sub. 9, N. $\frac{1}{2}$	50
90. Sub. 1 N. P't of 32 a. S. P't	4

JERSEYFIELD PATENT.

32. Sub. 3, W. $\frac{1}{2}$	100
32. Sub. 5, W. $\frac{1}{2}$, ex. 123 a. E. P't thereof, b'd W. by Highway	36
33. N. E. cor.	150
34. All in Stratford	130
59. Sub. 6	170
60. N. E. cor. square, 20 a. and S. E. $\frac{1}{4}$ or S. E. cor. 250 a.	270
61. W. P't	100
61. S. W. cor. or W. cor.	100
63. Ex. N. W $\frac{1}{4}$ and und. $\frac{1}{3}$ of E. $\frac{1}{2}$ paid by Frederick Bronson, E. L. Smith, Atty, or John J. Town- send, Ex'r.	583 $\frac{1}{2}$
64. Sub. 2	100
64. Sub. 3	100

Jerseyfield Patent — continued.

Town and lot.	Area in acres.
66. W. $\frac{1}{2}$	500
67. All in Fulton Co. 762 a. ex. 40 a. N. E. cor. thereof.....	722
88. All in Stratford, 363 a. ex. 100 a. N. E. cor. thereof	263
90. N. W. $\frac{1}{4}$	250
91.	1,000

KINGSBORO PATENT.

Westerly Allotment.

Johnstown :

516. N'ly P't J. Wiley Lot	25
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LOT AND LOW'S PATENT.

Ephratah :

7. Sub. 2	130
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Caroga :

11. Sub. 2, ex. $45\frac{5}{8}$ a. S. P't and $34\frac{1}{2}$ a. b'd N. by Mann, E. and W. by lot line and S. by Stone.	$52\frac{7}{8}$
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HAMILTON COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total Number of Acres 157,608.446.

DETAILED STATEMENT.

ARTHURBORO PATENT.

Town and lot.	Area in acres.
Morehouse :	
27.	200
28.	200
33.	200
36.	200
38. Ex. 30 a. S. W. P't.	170
41.	200
47.	200
48.	200
49.	200
50.	200
51.	200
62.	200
63.	200
65.	200
66. N. $\frac{1}{2}$	100
76.	200
79.	200
83.	200
88.	200
89.	200
90.	200
92.	200
93.	200
95.	200
97.	200
98. Ex. und. $\frac{1}{2}$ paid by T. P. Ballou.	100

BETHUNE TRACT.

Town and lot.	Area in acres.
3. 100 a. N. P't and 25 a. N. W. cor of 200 a. S. P't.....	125
5.	120
6.	120
7. 25 a. N. E. and 17 a. S. W.....	42
8.	300
9. W. side, lying N. W. of East branch of West Canada Creek.....	60
14. Ex. 200 a. S. P't.....	100
15.	120
16.	120
17.	300

MOREHOUSE 8,000 ACRE TRACT.

2. S. end.....	50
4.	200
5.	200
6.	200
7.	200
8.	200
9.	200
10.	200
11.	200
12.	200
13. N. W. cor. 45 a. and S. W. cor. 45 a.....	90
17. S. $\frac{1}{2}$	100
20. S. end	100
22.	200
23.	200
24.	200
25.	200
26. W. $\frac{1}{2}$	100
29. ...	200
30. N. $\frac{1}{2}$ and S. W. P't.....	150
32.	200
33.	200
35. N. P't of E. $\frac{1}{2}$ 67 a. and N. W. cor. 50 a.....	117
40. N. end.....	38

TIFFT (J. G.) TRACT.

E. P't. b'd W. by Lot 3.....	1525
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Benson Township.

Benson :

9.	160
14.	160

Benson Township — continued.

Town and lot.	Area in acres
15. N. $\frac{1}{2}$	80
28.	160
29.	160
43.	160
45.	160
46.	160
62.	160
63. E. $\frac{1}{2}$	80
64. N. P't.....	40
68.	160
69.	160
75.	160
77.	160
78.	160
79.	160
Arietta :	
85.	160
91.	160
92.	160
Benson :	
100.	160
101.	160
102.	160
104.	160
110.	160
117.	107
118. S. E. cor. square.....	30
120. N. P't., ex. und. $\frac{1}{4}$ of all returned, being Adiron- dack Co.'s land.....	30
121.	160
123.	160
131.	160
Arietta :	
143.	180
144.	90
145.	160
146.	160
147.	160
Benson :	
149.	160
150.	160
155.	160
156.	160
157.	160
158.	160

Benson Township — continued.

Town and lot.	Area in acres.
163. Ex. und. $\frac{1}{2}$ paid by Finch, Pruyn & Co.....	80
168.	160
171.	160
177. N. $\frac{1}{2}$	80
179.	160
180.	160
181.	160
184. N. $\frac{1}{2}$	80
188.	160
189.	160
Arietta and Benson:	
190.	160
Arietta:	
191.	160
192.	160
193.	200
194.	240
195.	240
Benson:	
197.	160
198.	160
202.	160
204.	160
205.	160
206.	160
207.	160
214.	160
217.	160
218.	160
219.	160
220.	160
222.	160
223.	160
224.	160
225.	160
228. Ex. 25 a. S. W. cor.	135
230. Ex. 25 a. N. W. cor.	135
231.	160
244.	160
245.	160
246.	160
247.	160
252.	160
253.	160
254.	160
255.	160

Benson Township — continued.

Town and lot.	Area in acres
256.	160
257.	160
258.	160
259.	160
260.	160
262.	160
263.	160
265.	160
269.	160
271.	160
273. Ex. 40 a. E. side	120
281.	160
287.	160
291. S. $\frac{1}{2}$	80
292. S. $\frac{1}{2}$	80
293.	160
294.	160
296.	160
297.	160
298.	160
299.	160
300.	160
301.	160
302.	160
303.	160
307.	160
316.	160
318. Ex. S. $\frac{1}{4}$	120
319.	160
320.	160
321.	160
322.	160
323.	160
325.	160
327.	160
328.	160
329.	160
330.	160
Wells :	
331.	180
332.	160
333.	160
336.	160
338.	160
345.	160
351.	160
352.	160

Benson Township — continued.

Town and lot.	Area in acres.
353.	160
354.	160
355.	160
357. Ex. 50 a. S. E. cor.	110
358.	160
360.	180
361.	160
362.	160
368.	160
374. Ex. 90 a. N. W. cor., and 35 a. being all that remains of 160 a. N. P't after ex. 125 a. N. W. cor. thereof.	55
375.	160
376.	160
377.	160
378.	160
379.	160
380.	160
381.	160
382.	160

BERGEN'S PURCHASE.

PATENT No. 1.

7. Ex. 90 a. N. W. cor.	10
9.	100
11.	100

PATENT No. 3.

Hope:

Being that part of patent No. 3 b'd N. by Wells, W. by Benson Township and S. by Patent No. 4.	450
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PATENT No. 4.

All in Hope.	200
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PATENT No. 5.

1.	273
2.	273
3.	273

PATENT No. 6.

*East Side of Sacandaga River, East Part of
North $\frac{1}{2}$.*

Town and lot.	Area in acres.
1. Sturges Lot.....	100
2.	100
4. W. P't.....	75

East Part of South $\frac{1}{2}$.

1. Sturges Lot.....	100
2. Sturges Lot.....	100

West Side of Sacandaga River.

All.....	668
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PATENT No. 7.

5. Ex. 50 a. N. end owned by James Hayes.....	223
6.	273

PATENTS No. 8 and 9.

7.	108
11. N. W'ly $\frac{1}{2}$	54
12.	108

PATENT No. 11.

5. Ex. 30 a. S. W. and 25 a. N. W.....	218
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CHASE'S PATENT.

Benson :

101.	100
102.	100
103.	160
105.	160
106.	100
107.	100
108.	100
116. N'ly P't.....	40
117.	100
118.	100
119.	100
120.	100

GLEN, BLEECKER & LANSING PATENT.

1. Sub. 3.....	127
1. Sub. 4.....	110

Glen, etc., Patent — continued.

Town and lot.	Area in acres.
1. Sub. 6.....	129
1. Sub. 7.....	109
1. Sub. 8.....	110
1. Sub. 9.....	125
2. Sub. 5.....	125
2. Sub. 6.....	150
2. Sub. 7.....	150
2. Sub. 8.....	150
6. Sub. 1.....	100
6. Sub. 2.....	100
6. Sub. 3.....	96
6. Sub. 4.....	100
6. Sub. 6.....	100
8. Sub. 1, S. P't.....	60
8. Sub. 2.....	150
8. Sub. 3.....	150
8. Sub. 6.....	220
8. Sub. 7, S. P't.....	29
9. Sub. 1.....	100
9. Sub. 2.....	100
9. Sub. 3.....	100
9. Sub. 4.....	100

GORES.

GORE BETWEEN TOWNSHIP 1, TOTTEN & CROSSFIELD'S PURCHASE,
AND BERGEN'S PURCHASE AND OXBOW TRACT.

Wells :

2.	160
3.	160

Lake Pleasant :

4.	160
5.	160
6.	160

GORE BETWEEN TOWNSHIP 2, TOTTEN & CROSSFIELD'S PURCHASE,
AND TOWNSHIP 9. MOOSE RIVER TRACT.

Arietta or Lake Pleasant :

7.	100 ⁶⁷ ₁₀₀
8.	69 ⁶ ₁₀
9. ..	149 ⁸⁸ ₁₀₀
10.	124 ⁸⁷ ₁₀₀
11.	188 ¹ ₁₀
12.	207
13.	236 ³⁴ ₁₀₀
14.	240 ⁵⁸ ₁₀₀
15.	277 ¹⁷ ₁₀₀

LAWRENCE PATENT.

Town and lot.	Area in acres.
Arietta :	
6.	635
7.	635
Morehouse :	
14. N. W. cor.	36
Arietta :	
19.	635
22.	635
26.	635
Morehouse :	
34.	635
35.	635
36.	777
47.	635
48.	635
49.	635

LEWIS (MORGAN) SMALL TRACT.

Hope :	
2. In town of Hope.	100

MOOSE RIVER TRACT.

Township 9.

Arietta :	
7.	174
38.	200
39.	200
72.	200
Lake Pleasant :	
84. E. P't.	50
85. E. P't.	125
Arietta :	
118. Ex. 75 a. W. P't.	125
121.	120 $\frac{78}{100}$
146.	250

OXBOW TRACT.

Wells :	
10.	646
Lake Pleasant :	
18. Ex. 282 $\frac{4}{10}$ a. S. P't.	90 $\frac{6}{10}$
19.	274

Oxbow Tract — continued.

Town and lot.	Area in acres.
Wells :	
34.	300
Arietta :	
42.	301
Wells :	
51.	160
Arietta :	
61. All in Arietta	130
Wells :	
61. N. E. cor. in Wells.	40
Arietta :	
64.	155
75.	155
Lake Pleasant and Arietta :	
123.	155
Arietta :	
146. S. P't, rem. water	50
153.	155
188.	155
214.	155
218.	155
228.	375
252.	177
253.	177
259.	179
280.	248
290.	232 ⁸⁶ ₁₀₀
293.	232 ⁸⁶ ₁₀₀
297.	236

PALMER'S PURCHASE.

GENERAL ALLOTMENT.

Wells :	
1. Sub. 5	100
1. Sub. 6	100
3. Sub. 5	100
3. Sub. 6	100
4. Sub. 8	100
4. Sub. 9	100
4. Sub. 10	100
6. N. E. angle in Wells	359
9.	1000
15. All in Hamilton Co.	895

Palmer's Purchase — continued.

Town and lot.

Area in acres.

Hope :

24. Sub. 1.	200
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REAR DIVISION — LEFFERTS TRACT.

North $\frac{1}{2}$.*Range 1.*

Wells :

6. Ex. 25 a. E'ly end.....	75
9. S. W. $\frac{1}{2}$	50
10. Ex. N. E. $\frac{1}{3}$	36

Range 2.

6.	100
9.	100
10.	54

Range 3.

3.	100
4.	100
5.	100
6.	100
9.	100
10.	54

Range 4.

3.	100
4.	100
5.	100
6.	100
7.	100
8.	100
9.	100
10.	54

SICKELS AND VAN ANGLE TRACT.

Morehouse :

5.	200
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TOTTEN AND CROSSFIELD PURCHASE.

*Township 1,*North $\frac{1}{2}$.

Lake Pleasant :

4.	250
5.	250
6.	250

Courtney 500 a. Tract.

Town and lot.	Area in acres.
N. E. cor. b'd S. by Highway and W. by lands of Henry E. Courtney.....	87
B'd N. by Lake Pleasant, E. by lands formerly belonging to Chas. Greenman and W. by lands occupied by Samuel Call.....	50
B'd N. by Highway, E. by John Courtney and S. by lands formerly belonging to Eliza Lewis,	25
B'd N. by Highway, E. by lands in possession of W. C. Gallup and W. by Henry E. Courtney,	85

Spier and Brown Lot.

B'd N. by Township line, E. by lot 36, S. by lots 33 and 34 and W. by Lake Pleasant.....	400
--	-----

South East $\frac{1}{4}$.

Wells :	
S. E. cor. square.....	200

VAN WAGONER TRACT.

Allotment 4.

3.	258
4.	258
South West $\frac{1}{4}$.	
1.	200
2.	214
5. E. $\frac{1}{2}$	150
7.	220
8.	222
9.	271
10.	311
11.	311
12.	285
13.	105 $\frac{1}{2}$

Township 2.

Lake Pleasant :	
19. N. end 144 a. and S. E. cor. 20 a.....	164
20. E. Side.....	160
21. B'd N. by lands of Henry Satterle, E. by lot 22, S. by lands of Aaron Sturges and W. by Tefft and Russell's 144 a.....	50
21. W. side.....	184
22.	269
23.	269
24. B'd N. by Tefft and Russell's 84 a. E. and W. by lot lines, and S. by land of Charles Ahlschlager	70

Township 2 — continued.

Town and lot.	Area in acres.
25. N. end.....	50
29.	269
33. S. P't.....	85
34.	269
40.	269
44.	269
46.	269
51.	269
53.	269
55.	269
66.	269
77.	269
85.	269
86.	269

Township 3.

Arietta :

3. All in Arietta 100

Lake Pleasant :

4.	150
6.	150
7.	150
10.	150
11. Ex. S. E. $\frac{1}{4}$	112 $\frac{1}{2}$
12.	150
18.	150

Arietta :

20.	150
21. N. E. $\frac{1}{4}$	37
22.	112
24.	150
25.	150

Lake Pleasant :

27.	150
28.	150
29.	150
30.	150
31.	150
32.	150
33.	150
34.	150
35.	150
36.	150
37.	150
38.	150
39.	150

Township 3 — continued.

Town and lot.

Area in acres.

Arietta :

41.	150
47.	150
49.	150

Lake Pleasant :

50. Ex. S. W. $\frac{1}{4}$	112 $\frac{1}{2}$
51.	150
52. N. $\frac{1}{2}$	75
53. Ex. S. E. $\frac{1}{4}$	112 $\frac{1}{2}$
54.	150
58.	150
59. Ex. N. E. $\frac{1}{4}$	112 $\frac{1}{2}$
60.	150

Arietta :

63.	150
64.	150
65.	150
66.	150
67. Ex. N. W. $\frac{1}{4}$	112 $\frac{1}{2}$
68. S. W. $\frac{1}{4}$	38
69. Ex. N. E. $\frac{1}{4}$	112 $\frac{1}{2}$
70.	150
71.	150
72.	150

Lake Pleasant :

73. N'y end of 75 a. E. P't in Lake Pleasant	50
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Arietta :

73. N. W. P't in Arietta	50
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Lake Pleasant :

74.	150
75.	150
76.	150
77.	150
78. Ex. N. E. $\frac{1}{4}$	112 $\frac{1}{2}$
79.	150
80. Ex. S. W. $\frac{1}{4}$	112 $\frac{1}{2}$
81.	150
82. S. end of 25 a. E. cor. in Lake Pleasant	10

Arietta :

82. N. W. cor., square	5
83.	150
84. ..	150
85. Ex. N. W. $\frac{1}{4}$	112 $\frac{1}{2}$
86. E. end. of S. $\frac{1}{2}$	10

Township 3 — continued.

Town and lot.	Area in acres.
88.	150
89. Ex. S. E. $\frac{1}{4}$	112 $\frac{1}{2}$
90.	75
91. Ex. N. E. $\frac{1}{4}$	112 $\frac{1}{2}$
92. N. W. cor., square.....	5
93.	150
94.	150
95. N. $\frac{1}{2}$	75
96. S'ly end of 75 a. W. P't in Arietta	3
Lake Pleasant :	
96. S. E. cor. in Lake Pleasant.....	38
97.	150
98.	150
99.	150
100.	150
101.	150
102. E. P't in Lake Pleasant.....	100
Arietta :	
102. S'ly end of 60 a. W. P't.....	10
103.	150
104. S. W. cor., square.....	15
105. Same	15
106. S. E. cor., square.....	20
107. S. E. $\frac{1}{4}$ 37 a. and S. end of W. $\frac{1}{2}$, 10 a.	47
109. S. W. $\frac{1}{4}$ 37 a. and N. W. cor. square of all of N. $\frac{1}{2}$ and S. E. $\frac{1}{4}$ not covered by water, 3 a.....	40
110. N. E. cor., square.....	20
111. S. E. cor., square.....	20
112. N. W. cor, square.....	10
113. N. E. cor., square.....	10
114. N. W. cor., square of part not covered by water,	10
115. N. E. cor., square of part not covered by water,	10
116. N. W. cor., square....	10
117. N. E. cor., square.....	10
118. N. W. cor., square	20
Lake Pleasant :	
119. S'ly end of 50 a. E. P't in Lake Pleasant.....	20
120.	150
121.	150
122.	150
123. E. P't in Lake Pleasant.....	75
Arietta :	
123. S'ly end of 75 a. W. P't in Arietta.....	1
124. N'ly end.....	40
125. S. W. cor., square.....	15

Township 3 — continued.

Town and lot.	Area in acres.
126. S. E. cor. square of p't not covered by water....	2
127. S. W. cor., sq., of p't not covered by water....	2
129. N. W. cor., sq., of p't not covered by water....	10
130. S. E. cor., square.....	10
131. N. W. cor., square.....	2
132. W. $\frac{1}{2}$, 75 a., and N. E. cor., square, 10 a.....	85
133. N. E. cor., square.....	15
134. N. W. cor., square.....	50
135. E. end of N. $\frac{1}{2}$, 50 a. and N. W. $\frac{1}{4}$, 50 a.....	100
136. S. W. cor., square.....	25
137. N. E. cor., square.....	10
138. N. W. cor., square.....	50
139.	300
140.	300
141.	300
142.	300
143. N. W. P't in Arietta.....	150

Lake Pleasant :

143. E. P't in Lake Pleasant.....	100
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Township 6.

Arietta :

4.	640
5.	640
6.	640
10.	640

Lake Pleasant :

11. All in Lake Pleasant.....	400
16.	640
17.	640
18.	640

Arietta :

24. All in Arietta	500
27.	640

Lake Pleasant :

29.	200
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Arietta :

30. All in Arietta	50
31. Same.....	500
33.	640
37.	200
38.	200
46.	200

Township 6 — continued.

Town and lot.	Area in acres.
47.	200
54.	200
55.	200
62.	200
63.	200

Township 8.
North $\frac{1}{2}$.

Lake Pleasant:	
13.	269
14.	269
15.	269
16.	269
17.	269
18.	269
19. N. $\frac{1}{3}$	86 $\frac{2}{3}$
21.	260
22.	260
27.	260
29.	260
30.	260
31.	260
32.	260
39. N. W. cor.	48
40.	260
41.	243 $\frac{32}{100}$
44.	243 $\frac{36}{100}$

South East $\frac{1}{4}$.

5.	125
10.	125
11.	125
12.	125
13.	125
14.	125
15.	125
16.	125
17.	125
18.	125
19.	125
20.	125
21.	125
22.	125

Lake Pleasant:	
23.	125
24.	125

Township 8 — continued.

Town and lot.	Area in acres.
25.	125
"29. East"	125
"29. West"	125
30.	125
31.	125
32.	125
33.	125
34.	125
35.	125
36.	125
37.	125
38.	125
39.	125
40. Ex. 50 a. S. E. cor. in Wells	75

Wells :

40. S. E. cor. in Wells	150
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South West $\frac{1}{4}$.

Lake Pleasant :

S. W. cor.	2,500
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Township 9.

Lot b'd beg. at a tree standing at the outlet of Elm Lake, marked "W. B. and B. B.," th. S. 60° W. 12 c. 25 l., th. N. 30° E. 60 c. to a stake marked "B.," th. N. 60 °E. 14 c. to Lake shore, and th. S. along Lake shore to beg.	60
River Lot, b'd beg. at a beech tree marked "10 and 12," on the S. E. cor. of Lot 10 and S. W. cor. of Lot 12 of the Elm Lake Road Tract, th. N. 80° E. 134 c. to a stake marked corner, th. due N. 46 c. to a stake blazed on three sides, th. N. 85° W. 89 c. to the outlet of Elm Lake, th. 22 c. to the rear line of Lot 20 of the Elm Lake Road Tract at a point 10 c. from the N. E. cor. thereof, th. S. 28° E. to S. E. cor. of lot 20, and th. on the line of lots 20, 18, 14 and 12 of the Elm Lake Road Tract to beg.	704

ELM LAKE ROAD TRACT.

3.	50
6.	50
8.	50
10.	50

Elm Lake Road Tract — continued.

Town and lot.	Area in acres.
12.	50
13.	50
14.	50
15.	50
16.	50
17.	50
18.	50
19.	50
20.	50

Arietta or Lake Pleasant :

22.	50
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Townships 10 and 29, T. and C.

Wells :

4. S. end.....	300
6. Ex. 400 a. N. end and 290 a. S. E. end.....	326
11. Ex. 100 a. N. end.....	716

Township 21.

Long Lake:

1.	200
2.	200
3.	200
4.	200
5.	200
10.	200
11.	200
12.	200
13.	200
14.	200
15.	200
16.	200
17.	200
18.	200
21.	200
22.	200
23.	200
24.	200
25.	200
26.	200
27.	200
28.	200
29.	200
30.	200
31.	200
32. W. $\frac{1}{2}$	100

Township 21 — continued.

Town and lot.	Area in acres
33.	200
37.	200
38.	200
39.	200
40.	200
41.	200
46.	200
47.	200
49.	200
50.	200
51.	200
52.	200
53.	200
54.	200
58.	200
61.	200
62.	200
63.	200
64.	200
65.	200
66.	200
73.	200
74.	200
75.	200
76. N'ly P't land.....	175
77.	125
80. Water through center.....	80
83.	200
85.	200
86. N. W. & S. E. P'ts, water through center	150
90.	200
91.	200
92.	200
96.	200
101.	200
102.	200
103.	260
104.	200
105.	200
106.	200
107.	200
108.	200
109.	200
112.	200
113.	200
114.	200
115.	200

Township 3 --- continued.

Town and lot.	Area in acres.
116.	200
117.	200
118.	200
119.	200
120.	200
121.	200
124.	200
125.	200
126.	200
127.	200
129.	200
130.	200
131.	200
132.	200

*Township 22.*South $\frac{1}{2}$.

Long Lake:

23.	160
24.	160
25.	160
26.	160
27.	160
28. S. P't, rem. water.....	60
39.	150
40. S. P't, land.....	40
46.	160
47.	160
48.	160
49.	160
50. S. side, rem. water.....	130
60.	160
61.	160
63. N. end, S. P't water..	30

Township 23.

(Including Triangle).

1. N. E'ly end.....	75
105. P't water.....	130

Township 32.

Indian Lake:

N. W. cor., square, 1100 a., ex. 273 a. N. W. cor. thereof.....	827
--	-----

Township 33.

North East Corner.

Town and lot.	Area in acres.
1. Ex. und. $\frac{1}{2}$ thereof, Adirondack Co. land	80
2. Same	80
3. Do	80
4.	80
5.	80
19.	80
21.	80
22.	80
23.	80
24.	80
25.	80
26.	80
27.	80
29.	80
30.	80
43.	80
44.	80
45.	80
48.	80
49.	80
52.	80
53.	80
54.	80

Township 35.

Long Lake:

N. E. $\frac{1}{4}$, ex. 150 a. water, 320 a. Gospel and School lands, and 2,765 a. und. $\frac{1}{2}$ of all of rem. paid by Sarah T. Russell.	2765
S. E. $\frac{1}{4}$, ex. 300 a. water, 320 a. Literature Lands, and 2,690 und. $\frac{1}{2}$ of all of rem. paid by Sarah T. Russell.	2690

Township 37.

48.	160
50.	160
52.	160
54.	160
56.	160
58.	200
100. S. E. P't land	140

Township 40.

Ex. 6,001 a. water and Gospel, School and Literature lands; 50 a. on the W'ly side of Ra-

Township 40 — continued.

Town and lot.

Area in acres.

quette Lake, b'd beg. at a large rock-boulder on the S. shore of Sand Point from said rock, or place of beg., which is near a birch sapling, marked "C Lot 1," the bearing of the Western point or side of Pine Island is S. 13° W., the bearing to a large rock a few ft. E. of the E. end of Pine Island is S. 4° W., and the bearing of the W. point or side of High Island is S. $27^{\circ} 30'$ E. th. proceeding from said rock or place of beg. 30 c. 66 l. due N. to the N. side or shore of Sand Point, th. along the shore, around said Point, to beg.; 75 a. on the E'ly shore of Raquette Lake, known as the "Josiah F. Wood place," b'd N'ly and W'ly by the shore of the Lake, S'ly by a line par'l to the S'ly line of Township and running E'ly from a stooping Cedar tree on a sharp point of rocks at the Western extremity of a point of land known as "Osprey point," and E'ly by a line at right angles thereto; 40 a., more or less, b'd beg. at an Iron bolt in the top of a large rock or boulder on the N. Shore of Lake Elizabeth, said rock being N. 31° E. 24 c. 50 l. from the outlet of said Lake, and said outlet being 1 c. long from said Lake to Raquette Lake at low-water mark, th. from said Iron bolt N. 28° W. 21 c. 10 l. to a rock or boulder on the S. shore of Raquette Lake, th. W'ly and S'ly along said shore to the outlet of Lake Elizabeth aforesaid, and th. E'ly and N'ly along the N'ly and W'ly shores of said outlet and Lake Elizabeth to beg.; 30 a. E'ly end of Indian Point b'd W'ly 41 c. by line running N. 27° W., said line being 16 c. 63 l. W. from the Extreme point or E. branch of said Indian Point, measuring along the centre thereof; Bluff Island, in Raquette Lake, granted to the Protestant Episcopal Board of Missions of the Diocese of Albany, by chap. 552, Laws of 1881; 160 a. b'd beg. at the mouth of a small brook just W. of "North Point," so called, on the N. shore of Raquette Lake, th. N'ly, par'l with the E'ly line of Township 38 c. 75 l., th. E'ly par'l with N'ly line of Township 40 c., th. S'ly par'l with E'ly line of Township 38 c. 75 l. to said Lake, and th. W'ly along the shore of said Lake, as it winds and turns, including "North Point," to beg.;

Township 40 — continued.

Town and lot.	Area in acres.
160 a. being the W. end of "Long Point," b'd N., S. and W. by Raquette Lake and E'ly by the N. and S. centre line of Township; and ex. 3500 a., being an und. $\frac{1}{4}$ paid by M. H. Beecher (which $\frac{1}{4}$ was conveyed to W. H. Mead from the Tax sale of 1866) and an und. $\frac{1}{4}$ paid by Wm. Cleveland, of 7,000 a. N. W'ly P't of Township, b'd beg. at centre of the mouth of Brown's Tract Inlet on Raquette Lake, th. W'ly up said Inlet along its centre to the W'ly line of Township, th. N'ly or N. 30° W. along said line, to the N. W. cor. of Township, th. E'ly along the N'ly line of Township so far that by proceeding S. 30° E. par'l to the E'ly line of Township to the shore of said Lake at low-water mark and th. along the N'ly and W'ly shore of said Lake at low-water mark to the place of beg. there shall be embraced 7,000 a. after deducting 50 a. on the E. end of Indian Point formerly owned by Wm. Wood and Matthew Beach, and also deducting a piece of land on the E. end of Sand point heretofore sold to Wm. Constable	13,024

Township 50.

1.	160
2.	124
3.	124
9.	124
10.	124
11.	124
16.	160
17.	160
18.	160
19.	160
23.	160
24.	160
26.	160
27.	160
29.	160
30. N'ly P't land, S'ly P't water	60
34.	120
35.	120
36. E'ly P't water	100
42. S'ly P't water	100
43.	160
44.	160
45.	160

Township 50 — continued.

Town and lot.	Area in acres.
48.	160
49.	160
50.	160
51.	160
52.	160
53.	120
54.	120
67.	160
68.	160
69.	160
90. All in Hamilton Co.....	80

VROOMAN'S PATENT.

Morehouse :

35. W. P't of E. $\frac{1}{2}$	50
52. S. end.....	34

HERKIMER COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 9,646.686.

DETAILED STATEMENT.

BAYARD'S OR FREEMASON'S PATENT.

Town and lot.	Area in acres.
Winfield :	
5. Sub. 7.....	2½
Litchfield :	
64. Sub. 10.....	10

JERSEYFIELD PATENT

Salisbury :	
3. W. ½ ex. 50 a. N. E. cor. thereof, and 174 a. S. W. cor. 30 c. wide N. and S., and 58 c. long E. and W. 276 a., and 50 a. S. W. cor. of N. E. ¼,	326
35. S. W. ¼.....	250
38. E. ½ of N. E. ¼, ex. 50 a. N. end and 25 a. S. end thereof, 50 a.; 200 a. N. end of W. ½ and 150 a. N. P't of 200 a. S. end of W. ½.....	400
40. All of N. ½ in Salisbury, 223 ¼ a., ex. 215 a. N. E. cor. thereof.....	8¼

Ohio :	
48. W. McIntosh's Part.	14
53. All of W. ½ in Ohio, ex. 200 a. W. P't thereof, heretofore conveyed to Benjamin Hall, N. Bly and Alson Pierson.....	290

Salisbury :	
53. All of W. ½ in Salisbury.....	35
67. All in Salisbury.....	66
68. W. ½.....	500

Ohio :	
79. S. E. cor., "Chauncey Furgeson Lot," b'd N. by Town line and W. by land of Albert Abeel..	100

Jerseyfield Patent — continued.

Town and lot.	Area in acres.
80. B'd N. and E. by Seymour Radley, S. by Nelson Radley and W. by Highway	7

Salisbury :

82. All in Salisbury	100
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MACHIN'S PATENT.

LUSH & MARVIN'S TRACT.

North $\frac{1}{2}$.

Russia :

5.	160
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MOOSE RIVER TRACT.

Township 3.

Wilmurt :

76.	160
77.	160
88.	160
89.	160
90.	160
100.	160
101.	160
102.	124
112.	160
113.	160
114.	135
124.	160
125.	160
126.	140
136.	160
137.	160

NOBLEBORO PATENT.

New Survey.

7.	150
23.	150
47.	150
48.	150
52.	150
53.	150
54.	150
57. Ex. 25 a. E. end and 100 a. W. end	25
59.	150

Nobleboro Patent — continued.

Town and lot.	Area in acres.
60.	150
61.	150
62.	150
90.	150
91.	150
94.	150
97.	150
98.	150
102.	150
104.	150
105.	150
123.	150
125.	150
126.	150
127. Ex. 10 a. S. E. cor	140
129.	150
132.	150
140.	150

Old Survey.

1. N. and S. Lakes and Flow lands.	
99. E. P't 200 a., ex. und. $\frac{2}{3}$ thereof paid by F. Bronson	66 $\frac{2}{3}$

ROYAL GRANT.

Fourth Allotment.

Salisbury :

142. N. W. cor., square, 30 a. and S. W. cor., square, 30 a.	60
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SUSANNAH JOHNSON TRACT.

27. S. E. cor., b'd N. by land of Joseph H. Walrath and line par'l to S. line of lot, and W. by Highway	25
28. W. end	15

WATSON'S EAST TRIANGLE.

Wilmurt :

6. S. $\frac{1}{2}$ and N. E. $\frac{1}{4}$	430
7. W. $\frac{1}{2}$	289
13. Ex. 183 $\frac{25}{100}$ a. E'ly P't, and 205 $\frac{78}{100}$ a. b'd N. and S. by lot lines, and E. by John Beach's 183 $\frac{9}{10}$ a.	660 $\frac{27}{100}$
15. E. P't	346

WOODHULL TRACT.

7. All in Wilmurt.	92
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JEFFERSON COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

DETAILED STATEMENT.

PORT PUTNAM, VILLAGE OF.

Town and lot.

Area in acres.

Cape Vincent:

126 to 139 inc., 222 to 237 inc., 318 to 333 inc., each
50 ft. wide and 125 ft. deep, located on the S.
E. bank of River St. Lawrence, about 2 miles
E. of Cape Vincent.

WORTH, TOWN OF.

South $\frac{1}{2}$.

Worth:

1. B'd beg. at N. E. cor. of 100 a. conveyed to
Valentine Butler, th. along said land S. 2° W.
26 c. 50 l. to S. E. cor. thereof, th. par'l to N.
line S. 79° E. 19 c., th. N. 2° E. par'l to E.
line 26 c. 50 l. to N. line, and th. N. 79° W.
along N. line to beg. 50

LEWIS COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 2,865.243.

DETAILED STATEMENT.

BOYLSTON PURCHASE.

Township 13.

Town and lot.	Area in acres.
Osceola :	
50. B'd N. by Potter or Porter, E. and W. by lot lines and S. by Brockway.....	61
63. N. $\frac{1}{2}$ of 75 a. E. P't, b'd W. by A. Lake.....	37 $\frac{1}{2}$
74.	236
134. S. P't, b'd N. by Geo. Boin.....	83

BRANTINGHAM TRACT.

Greig :	
43.	209
95. S. P't, Trull.....	141
113. N. ¹	100
118. S. E. cor. 100 r. N.....	100
171. W. side, 50 a. ex. 16 $\frac{2}{3}$ a. all contained therein of 50 a. b'd N. by Bender, E. and W. by lot lines and S. by Smith.....	33 $\frac{1}{3}$
Lyonsdale :	
203. E. side	32
204.	183
205. W. side, b'd E. by Bogart.....	144
208.	190
222. N. E. cor., "E. A. Brown".....	2 $\frac{1}{2}$
223. W. P't, b'd E. by Bogart.....	90
226. E. P't.....	77
262. N. E. cor., b'd S. by Moose river.....	50
305. N. W. cor., b'd E. by T Rogers and S. by Black river.....	14
312. E. side, 93 a. ex. 3 a. und. paid by Caleb Lyon..	90
314.	181

INMAN'S TRIANGLE.

Town and lot.

Area in acres.

Lewis :

153. N. E. cor.,	100	}
153. E. side.....	100	}
153. W. P't, 64 a. ex. $13\frac{9}{100}$ a. N'ly end thereof....	$50\frac{91}{100}$	}
153. N. W. cor.....	50	}

MACOMB'S PURCHASE.

GREAT TRACT 6.

Township 1.

20. B'd N. by lot line, E. by C. Sheitenmantel or Sheidelman and J. W. Barrett's land, or C. Sheidleman's land, S. by lot line or J. W. Bar- rett's land and W. by Van Wagner's or Van Wagoner's land, or 71 a. W. side of lot.....	45
44.	259
57. E. side.....	100

Township 3.

Turin :

LUCRETIA CONSTABLE'S PURCHASE.

84. B'd N'ly by Hiram Carpenter's land, E'ly by lands of Aaron Parsons and others, S'ly by lot line and W'ly by land of Heirs of Calvin Roberts, dec'd	2
84. B'd N'ly and E'ly by Hiram Carpenter's land, S'ly by lot line and W'ly by land of Brainard Coe and others.....	3
84. B'd N'ly, E'ly and W'ly by Eli Doud's land and S'ly by lot line.....	4
84. S. W. cor. b'd N'ly by Hiram Carpenters land and E'ly by B. Coe's land.....	3

WATSON'S WEST TRIANGLE.

Watson :

240. S. P't.....	48
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WILKES TRACT.

Greig :

5. S. P't.....	46
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ONEIDA COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 3,816.493.

ADGATE'S EASTERN TRACT.

Gouverneur Lot.

Town and lot. Area in acres.
Forestport :

Ex. 100 a. S. P't, owned by T. Dellarme..... 600

Miller & Swanton Lot.

6. Sub. 1, Ex. 32½ a. conveyed to John Harrig, Jr., June 16, 1864, and recorded in Book 253 of Deeds 49, and 39¹⁶/₁₀₀ a. conveyed to John Skillen April 1, 1863, and recorded in Clerk's Office of Oneida county April 10, 1863, in Book 244, page 76..... 28³⁴/₁₀₀
10. 350
14. N. P't, 300 a. S. W. cor. 50 a., and 50 a. S. W. cor. of Sub. 1, 12 c. N. and S. and 41¾ c. E. and W..... 400
15. 400

ADGATE'S WESTERN TRACT.

East Side of Black River.

Boonville :

55. N. P't..... 25
73. B'd beg. on W. line of lot in centre of road to Hawkinsville, th. on lot line N. 36¼° W. 8 c. 37 l., th. N. 55° E. 15 c., th. N. 35° W. 7 c., th. N. 55° E. 9 c. 60 l. to E. line of lot, th. S. 1° W. 24 c. 40 l. to centre of road to Hawkinsville, and th. S. 72½° W. along the centre of said road 9 c. 50 l. to beg..... 20
74. B'd beg. at the N. W. cor. of Nathan Jones' lot, th. N. 1° E. 2 c. 80 l. to centre of road, th.

Adgate's Western Tract — continued.

Town and lot.	Area in acres.
W'ly along said centre 1 c. 45 l. to Wheelock's line, th. N. 1° E. 12 c. 84 l., th. N. 52° E. 5 c. 90 l., th. S. 1° W. 5 c., th. S. 26 $\frac{3}{4}$ ° E. 15 c. 58 l. to Nathan Jones' land, and th. N. 89° W. 10 c. 50 l. to beg., 13 a. ex. 2 a. on N. side of road adj. land owned and occupied by James E. Wells, heretofore sold by Andrew J. Moon and wife to M. V. B. Moon, and ex. 2 a. on S. side of road, deeded by Samuel L. Joslyn and wife to John Bertunah or Bedunah.	9
74. B'd beg. in center of road N. 89° 10' E. 9 c. 75 l. from the W. line of lot, th. N. 2° 10' E. par'l with W. line 32° 38' to a stake and stones, th. N. 52° 10' E. 9 c. 54 l., th. S. 2° 10' W. 18 c. 50 l., th. S. 52° 10' W. 6 c. 25 l., th. S. 2° 10' W. 13 c. 12 l. to centre of road and th. S. 89° 10' W., in centre of said road, 2 c. 53 l. to beg,	16 $\frac{1}{2}$
74, 75, 76 and 79. Parts thereof, being the same premises conveyed by Morris S. Miller and others to Richard Hulbert by Deed dated January 15, 1856, recorded in Clerk's office of Oneida Co., March 22, 1856, in Book 194 of Deeds, page 478, etc.	155 $\frac{89}{100}$
75, 76 and 79. Parts thereof, b'd beg. at a hemlock tree on N. side of Cummins Creek about 1 $\frac{1}{2}$ c. below Burgess saw mill, th. N. 10° E. 7 c. 50 l. to a beech marked, th. N. 80° E. 40 c. 50 l. to a hemlock marked, th. S. 10° E. 16 c. 75 l. to a spruce marked, th. S. 71° W. 49 c. 46 l. to Cummins Creek at a spruce marked and th. up said creek 33 c. 50 l. to beg., 100 a. ex. 15 a. p't of Lot 75 as surveyed by C. L. Phelps, Feb. 23, 1864, and deeded to Andrew Wells, January 1, 1864.	85

BAYARD'S OR FREEMASON'S PATENT.

Bridgewater:

5. Sub. 7.	21 $\frac{1}{2}$
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MACHIN'S PATENT.

Towns of Ava, Boonville and Steuben.

Boonville:

6. B'd beg. on E. line of lot 20 c. from S. E. cor. thereof, th. S. 89° 15' W. par'l with S. line of lot 35 c. to stake and stones, th. N'ly along land of Henry Shott 20 c. to a stake and stones,

Machin's Patent — continued.

Town and lot.	Area in acres.
th. N. 89° 15' E. along land of John A. Philips 35 c. to lot line and th. S. 20 c. to beg., 70 a., ex. 2 a. thereof, occupied for road bed by the Black River & Utica R. R. Co.....	68
16. Ex. 300 a. S. P't.....	252 $\frac{38}{100}$

ONEIDA CASTLE VILLAGE.

- Vernon :
- 16. Reserved for Public Buildings.
 - 21.
 - 34. Reserved for Cemetery.
 - 58.
 - 105.
 - 110.

REMSENBURGH PATENT.

- Forestport :
- 3. N. E. cor., b'd S. by Byford, or land of S. Bigford,
or land occupied by S. Beckford, and W. by
land of O'Brien, 170 a., ex. 84 a. N. E. cor.
thereof, b'd S. by Tefft and W. by Highway.. 86
 - 19. S. W. $\frac{1}{4}$ 125
 - 21. S. E. cor., b'd N. and W. by River..... 3

SCRIBA'S PATENT.

Township 3.

- Annsville :
- 13. S. E. cor 18
 - 80. In N. $\frac{1}{2}$, (Mortgage, Sept. 19, '71)..... 21 $\frac{1}{16}$
 - 80. S. $\frac{1}{2}$ of W. P't. (Same.)..... 48 $\frac{3}{16}$
 - 81. All. do..... 48 $\frac{3}{16}$

- Florence :
- 103. S. E. cor., b'd beg. on E. side of Highway lead-
ing from Empeyville to Remsen, at Benjamin
Tanner's Saw-mill at S. line of T. H. Simpkins'
land, th. along Simpkins' land to Lot 104, th.
S'ly along lot line to land of Ransom and Ben-
jamin Tanner, th. W'ly along said land to said
Highway, and th. N'ly along said Highway to
beg..... 11
 - 117. B'd beg. at S. W. cor. of lot. th. S. 67° E. along
lot line 16 c. 26 l., th. N. 23° 53' E. 22 c. 32 l.,
th. S. 67° E. 3 c. 50 l. to centre of Highway,
th. N. 23° 53' E. 20 c. 89 l. to centre or turn in
Highway, th. N. 6° 52' along centre of High-

Township 3 — continued.

Town and lot.	Area in acres.
way 6 c. 81 l. to lands of Wm. Whipple on lot 103, th. N. 67° W. 16 c. 26 l. to line, th. S. 23° 53' along lot line 48 c. 74 l. to beg.....	88 $\frac{32}{100}$
Annsville :	
150. S. E. cor.....	18

Township 8.

West Part in Camden.

Camden :	
8. B'd N. by lands of Abram Skinner, E. by lands of F. Skinner, S. by lands formerly owned by Strong, and W. by lands of Robert Robertson.	30
44. N. W. cor., b'd E. by Fish Creek and S. and W. by lands of Miner Buel or Buell.....	3

Township 9.

Vienna :	
19. N. W. cor.....	14

Township 10.

North $\frac{1}{2}$.

31. N. end	
55. W. $\frac{1}{2}$ of 49 $\frac{1}{2}$ a. S. P't.....	24 $\frac{3}{4}$
63. S. E. cor.....	14
66. W. P't, b'd beg. at N. E. cor. of lot 65, th. S. 68° E. along lot line 7 c. 75 l. to a stake, th. S. 22° W. 33 c. to a stake on N. line of Peter J. Munro's Tract, th. N. 80° W. along said Monro's N. line 8 c. 4 l. to the S. E. cor. of lot 65, and th. N. 22° E. along E. line of said lot 65, 35 c. to beg.....	26 $\frac{84}{100}$

UTICA CITY.

West Street.

Utica City :	
28. Taylor's Map.....	

East Side.

Re-allotment of Block 12, Stocking Farm.

Block 2.

Seventh Ward.	ft.
18.	40x114

West Side.

Re-allotment of Block 12, Stocking Farm.

Block 1.

28.	40x114
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WILETT'S (MARINUS) 2000 a. TRACT.

Town and lot.

Area in acres

Steuben :

5. W. P't, 25 c. wide N. and S. and 26 c. long E. and W	65
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WOODHULL TRACT.

Forestport :

13. Sub. 16.....	83
38. Sub. 5, S. $\frac{1}{2}$	59
38. Sub. 6.....	114 $\frac{39}{100}$
39. Sub. 1.....	100
39. Sub. 3.....	180
39. Sub. 4, 5 and 6, and P't of B. being W. P't of lot.....	156
40. Sub. 3 N. $\frac{1}{2}$	54 $\frac{1}{2}$

SARATOGA COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 9,489.912.

DETAILED STATEMENT.

DARTMOUTH PATENT, SMALL TRACT.

Range 4.

Town and lot.

Area in acres.

Hadley :

3.	{ B'd N. by Town land, E. by lot 4, S. by lands of Jonathan Flanders and W. by lands of Alexander Kennedy.....	36
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GLEN AND YATES PATENT.

Day :

13.	N. W. cor. b'd S. and E. by land assessed to Jesse Perkins.	16
48.	N. E. P't b'd beg. No. 60° E. 28 c. from the original lower corner of lot 47, th. N. 60° E. 31 c. 50 e. to the N. E'ly line of above Patent, th. S. 30° E. 33 c. 33 l. to a cor., th. S. 60° W. 31 c. 50 l. to a cor., th. N. 30° W. 33 c. 33 l. to beg.....	105

GLEN AND 44 OTHERS PATENT.

6.	250
17.	120

Corinth :

39.	All in Corinth.....	112
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Edinburgh :

39.	All in Edinburgh.....	150
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Corinth :

51.	All in Corinth.....	86
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Glen, etc., Patent — continued.

Town and lot.	Area in acres.
Edinburgh :	
59.	250
60.	250
65.	250
81.	250
85. Sub. 3	100
86. Sub. 7.....	100
87. Sub. 9.....	100
88. Sub. 10.....	100
108.	250
112.	250
134. N. E. end or E. P't in Edinburgh.....	200
Providence :	
141, 142, 143 and 144, Sub. 8.....	100

KAYADEROSSERAS PATENT.

17th Allotment, Great Lot 6.

Greenfield :	
12. B'd N. by highway leading from Stile Tavern stand to Henry Lockwood's, E. by Great Lot 7 of above allotment, S. by lands of R. Morris and W. by lands of C. L. Williams.....	40 $\frac{15}{100}$

Great Lot 9.

Wilton :	
3. Sub. 1, E. P't b'd. beg. at a stake in the skew line, th. N. 74° 45', W. 10° to a stake, th. S. 9 c. to the skew line, and th. N. 55° E. along said line to beg	4a 21

18th Allotment, Great Lot 2.

3. Sub. 4, b'd, beg. at a stake near a yellow pine tree at the N. E. cor. of lands formerly in possession of James Herrick, now of N. Robbloe, th. W. 15 c. 20 l. to a stake, th. N'ly 44 c. 47 l. to the skew line, th. along said line N. E. 18 c. 23 l. to a stake, and th. S. 57 c. 44 l. to beg. ..	60
--	----

19th Allotment, Great Lot 11.

Northumberland :	
1. B'd beg. at S. W. cor. thereof, th. E. along lot line 58 c. 38 l. th. N. as the needle pointed in 1769, 15 c. 66 l. th. W. 58 c. 38 l., th. S. to beg.....	90 $\frac{3}{4}$

21st Allotment, Great Lot 13.

Town and lot.

Area in acres.

Greenfield :

- | | |
|--|----|
| 3. Sub. 4, b'd. N. by lands of Charles Hunt, E. by
22d. allotment, S. by lands of Lewis S. Mills
and W. by Sub. 3..... | 55 |
|--|----|

22d Allotment, Great Lot 13.

- | | |
|--|----|
| F. B'd N. by lands of W. W. French, E. by lands
of Charles E. Benedict, S. by lands of Perry
Arnold and W. by lands of Standish and
others..... | 75 |
|--|----|

24th Allotment, Great Lot 1.

Town of Corinth.

Corinth :

- | | |
|---|-----|
| 1. Sub. A. all in Corinth, 299 a. except 100 a. S. $\frac{2}{3}$
of 150 a. N. P't thereof..... | 199 |
| 1. Sub. B..... | 348 |
| 2. Sub. 2 S. P't..... | 100 |
| 3. Sub. D all in Corinth, 486 a. except 101 a., being
all of 106 a. W. $\frac{1}{2}$ of 212 a., S. P't of Sub., and
of 8 a., N. of and adj. said 212 a. in said town
of Corinth..... | 385 |

Great Lot 2.

Town of Corinth.

- | | |
|---|-----|
| 1 or a. Sub. 1 N. P't b'd S. by Hewitt, Clark and
Andrews or Anderson and Spaulding, 900 a.
ex. 200 a. S. $\frac{1}{3}$ of 600 a. N. end thereof..... | 700 |
| 2 or b. S. P't b'd N. by Chrysler lot, 737 a. ex. 400
a. b'd N. by Chrysler lot, E. and W. by lot
lines and S. by N. M. Houghton..... | 337 |

Great Lot 3.

Town of Corinth.

- | | |
|---|-----|
| 1. Sub. A. S. P't..... | 30 |
| 1. Sub. B..... | 175 |
| 1. Sub. C..... | 175 |
| 2. Sub. 1, N. P't, b'd S. by D. Martin or I. Carpenter. | 503 |
| 2. Sub. 2, S. P't, b'd N. by Tiffany..... | 90 |

Town of Day.

Day :

- | | |
|----------------|-----|
| 1. Sub. 1..... | 100 |
| 1. Sub. 3..... | 80 |

Great Lot 4.

Town and lot.	Area in acres.
Corinth :	
1. Sub. 2, 461 a. ex. 150 a. S. end thereof.....	311
2. B'd N. by Gowan or Gower lake, E. and W. by lot lines and S. by Riley, 708, ex. 250 a. b'd N. by Sherman, Houghton and Ambler, E. and W. by lot lines and S. by Riley.....	458

Great Lot 6.

1. Sub. N. N. P't.....	35
2. Sub. H.....	100

PALMER'S PURCHASE.

GENERAL ALLOTMENT.

Day :	
16. All in Day.....	37
27. All in Day, 555, ex. 305 a. N. P't thereof.....	250
31. B'd N. by Co. line, E. and W. by lot lines and S. by 888 a. assessed to L. Thompson, Weaver & Co.....	50
35. N. P't of all in Day, b'd S. by 525 a. assessed to F. G. McOmber.....	209
45. Ex. 700 a. N. end and 150 a. S. end.....	150

SANDER'S PATENT.

Corinth :	
12. W. $\frac{1}{2}$	50
15.	100
17.	100
21. Stedman Lot.....	100
22. Bussing Lot.....	100
29.	99
30.	96
33.	87
34.	87
35.	101
37.	101
38.	101
39.	82

Small Lots.

1.	23
2.	24
3.	17

ST. LAWRENCE COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 41,263.314.

DETAILED STATEMENT.

CANTON TOWNSHIP.

Mile Square Lots.

Range 3.

Town and Lots.	Area in acres.
Canton :	
7. Sub. 6, S. W'ly $\frac{1}{2}$	50

COLUMBIA VILLAGE.

Main Street.

North Side.

Madrid :	
14.	

COOPER'S FALLS VILLAGE.

DeKalb :	
B'd N., N'ly or N. E'ly by Village Lots 13, 15 and 17, E'ly, S. E'ly or S'ly by center of Plank Road from DeKalb Village to the Village of Cooper's Falls, S'ly or S. W'ly by centre of River or Ravine St. or Ave., to be laid out 100 ft. in width from said Plank road to Oswegatchie River and N. W'ly by Oswegatchie River.....	21 $\frac{1}{2}$

MACOMB’S PURCHASE.

Great Tract 2.

Township 1, “Sherwood.”

North East $\frac{1}{4}$.

Town and lot. Area in acres
Colton :

S. W. P’t (flowed lands)..... 4,777

North West $\frac{1}{4}$.

Ex. 2,733 $\frac{1}{2}$ a. N. P’t of the E. $\frac{1}{2}$ thereof..... 5,733 $\frac{1}{2}$

Township 2, “Oakham.”

South West $\frac{1}{4}$.

Hopkinton :

Ex. 1,500 a. und. paid by H. N. Redway, or Isaac
Ellis, und. 2,000 a. paid by Geo. B. Burnham
and und. 3185 a. paid by David Rice..... 1,885

Township 4, “Harewood.”

Cotton :

S. E. $\frac{1}{4}$, Ex. 5,250 a. N. P’t thereof and 1954 $\frac{92}{100}$
a. being all that remains of 2,355 a. S. E. cor.
after reserving therefrom 319 $\frac{6}{10}$ a. Cranberry
Lake and the flowed lands around the same, as
per map on file in the Comptroller’s office, and
80 $\frac{48}{100}$ a. b’d beg. at the junction of the W. line
of the S. E. $\frac{1}{4}$ of Township with the N. bank
of the Oswegatchie River, th. N. 2° 45’ E. along
said line 25 c. 49 l., th. S. 88° E. 19 c. 72 l., th.
S. 2° W. 40 c., th. N. 89° W. 20 c. 35 l. to the
W. line of the S. E. $\frac{1}{4}$ of Township and th. N.
2° 45’ E. along said line 14 c. 85 l. to beg..... 1,115 $\frac{388}{1000}$

Township 5, “Jamestown.”

- | | |
|--|-------|
| N. E. cor. 1 mile-square..... | 640 |
| 1. On N. line of Township, 1 mile W. of N. E.
cor. thereof..... | 640 |
| 2 and 3. Pratt Lot, on N. line of Township, 2 miles
W. of N. E. cor. thereof, 1 mile N. and S. and
2 miles E. and W..... | 1,280 |
| 4. 1 mile square, on E. line of Township, 1 mile S. of
N. E. cor. thereof..... | 640 |
| ..... | 200 |
| 5. 1 mile square, 1 mile W. of E. line and 1 mile
S. of N. line of Township..... | 640 |
| 6. 1 mile square, 2 miles W. of E. line, and 1 mile
S. of N. line of Township..... | 640 |

Township 7, "Granshue."

Town and lot.	Area in acres.
N. P't 20, 550. Ex. 3,213 a. Lot 1, 3,274 a. Lot 2, 3,211 a. Lot 3, 3,211 a. Lot 4, 3,194 a. Lot 5 and 3,075 a. Lot 6.....	1,372
S. P't.....	9,092

Township 8, "Hollywood."

30.	544
34.	582
35.	641
36.	679

Township 9, "Kildare."

Hopkinton :

6.	610
7.	610
9. Und. $\frac{1}{8}$ heretofore p'd by Sarah S. Wood.....	101 $\frac{2}{3}$
14.	610
15.	610
23.	610
24.	610
40.	610
47.	610

Township 11, "Wick."

Parishville :

4. E. side.....	160
5. W. side.....	267
11. W. side.....	265
13. S. W. cor. (S. and W. of road).....	38

GREAT TRACT 3.

*Township 11.**Brodie Tract.*

Pitcairn :

139.	148
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Township 15.

Fine :

S. $\frac{1}{2}$, ex. 8,266 a. S. E. P't and 2,312 a. W. P't thereof.	4,202
--	-------

NORFOLK VILLAGE.

Norfolk :

77. Sub. 23 P't beg. above Bridge Forge Lot No. 1, at S'ly cor. of the stone abutment at N. end of Bridge, th. S. 51° E. 1 c. 38 l., th. S. 56° 50' E. 1 c., th. S. 33° 30' W. 1. c. 38 l. to the River shore and th. in a right line to beg.	
--	--

OGDENSBURG CITY.

Block 182.

Town and lot.

Oswegatchie:

Area in acres.

11.

Block 206.

1.
2.
3.
4.
7.
8.
9.
10.
11.
12.
15.

Block 208.

10.

Block 418.

All

Block 419.

All

Block 423.

All

ST. REGIS RESERVATION.

Indian Meadows along Grass River.

Massena :

5.	. . . . .	1	$\frac{85}{100}$
8.	. . . . .		$\frac{45}{100}$
9.	. . . . .		$\frac{84}{100}$
11.	. . . . .		$\frac{76}{100}$
12.	. . . . .	4	$\frac{72}{100}$
19.	. . . . .		$\frac{12}{100}$
20.	. . . . .		$\frac{18}{100}$
21.	. . . . .		$\frac{12}{100}$
22.	. . . . .		$\frac{20}{100}$
23.	. . . . .		$\frac{21}{100}$
24.	. . . . .		$\frac{30}{100}$
25.	. . . . .		$\frac{24}{100}$
30.	. . . . .	4	
31.	. . . . .	2	

St. Regis Reservation — continued.

Town and lot.	Area in acres.
36.	1 $\frac{3}{4}$
38.	4 $\frac{35}{100}$
39.	1
40.	1 $\frac{85}{100}$
41.	1 $\frac{63}{100}$
45.	1 $\frac{15}{100}$
46.	$\frac{35}{100}$
47.	1 $\frac{1}{2}$
50.	$\frac{61}{100}$
52.	2 $\frac{93}{100}$
53.	15

WARREN COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres, 19,045.900.

DETAILED STATEMENT.

BRANT LAKE TRACT.

Town and lot.	Area in acres.
Hague :	
16.	160
17.	160
18.	160
19.	160
22.	160
23.	160
24.	160
Horicon :	
107. Ex. und. $\frac{1}{2}$ paid by A. Crandall (part water), bonded when bid in.	80
141. S. E. cor.	20

DARTMOUTH PATENT.

GREAT TRACT.

Range 4.

Stony Creek :	
5.	234

Range 6.

Thurman :	
5.	234
6.	234

Range 8.

7. N. W. cor.	170
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UPPER RIVER DIVISION.

Town and lot.

Area in acres.

Stony Creek :

5. W. $\frac{1}{2}$	50
6 Same	45

ELLIS PATENT.

Hague :

248.	102
257.	94

GARLAND'S (PETER) PATENT.

Bolton :

3.	167
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GORE BETWEEN THURMAN'S ROAD PATENT AND HOFFMAN TOWNSHIP.

Chester :

N. E. end	92
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HAGUE TRACT.

Hague :

50.	150
54.	180
57.	184
58.	184

Hoffman Township.

Chester :

93. S. E. cor	165
---------------------	-----

Hyde Township.

Thurman :

17. N. W. cor	50
---------------------	----

JESSUP'S PATENT.

7,550 a. Tract.

Luzerne :

8. B'd N. and S. by lot lines, and W. by Hudson river	121
12. E. P't, b'd W. by Goodness	96

LUZERNE TRACT.

Caldwell :

66.	127
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McDONALD'S (NEIL) PATENT.

Bolton :

10. S'ly P't	80
--------------------	----

NORTH WEST BAY TRACT.

Town and lot.	Area in acres.
40.	175
119.	182

PALMER'S PURCHASE.

REAR DIVISION.

Great Lot 1.

Stony Creek :

27. ..	160
34.	160

Thurman :

61.	160
63. S. E. P't, or S. or S. E. $\frac{1}{2}$	80
64. W. $\frac{1}{2}$	80
69. Same	80
85.	160
86.	160

Great Lot 2.

20.	150 $\frac{7}{10}$
21.	150 $\frac{7}{10}$
27. Ex. 53 a. W. end	72 $\frac{6}{10}$
54. N. W. cor. 50 a. and S. E. cor. 25 a.	75
55.	125 $\frac{6}{10}$
56.	125 $\frac{6}{10}$
59. N. E. cor.	25
60.	150 $\frac{7}{10}$

RIVER DIVISION.

East End.

Great Lot 1.

Stony Creek :

All in Warren Co	305
------------------------	-----

Great Lot 3.

N. E. cor., b'd N. by Middle Division, E. by Sub. 1, S. by Saratoga Co. and W. by Lot 4.	45
--	----

TONGUE MOUNTAIN TRACT.

Bolton :

6.	168
---------	-----

Hague :

44.	212
46.	155
48.	273
49.	270

TOTTEN AND CROSSFIELD'S PURCHASE.

Township 11.

Town and lot.	Area in acres.
Thurman :	
9. All in Thurman.....	29
10. Same	90
11. S. P't.....	112
Johnsburgh :	
14. Ex. und. $\frac{1}{3}$, Adirondack Co.'s land.....	200
15.	300
16.	300
30.	300
31.	300
32.	300
33.	300
34.	300
37. S. end.....	50
39.	300
40.	300
44. N. end.....	150
45. Same.....	150
46. Same.....	98
56.	300
59.	300

Township 13.

3.	235
10.	258
11.	241
12.	231
22.	130
49.	160
101.	198
116.	171
121.	136
122.	152
123.	154
124.	180
125.	150
140.	134
141.	139
142.	118
143.	150
144.	127

Township 14.

Town and lot.	Area in acres.
North $\frac{1}{2}$ and South East $\frac{1}{4}$, Residue of Township.	
50.	160
51.	160
99. S. W. cor.....	33

SOUTH WEST $\frac{1}{4}$, CONKLIN AND OTHERS' TRACT.

Johnsburgh :

1.	178
2.	150
3.	112
4.	150
5.	150
6.	150
7.	150
9.	150
11.	115
12.	178
16.	150
18.	150
19.	150
22.	112
24.	178
25.	178
26.	150
27.	112

Township 24.

Chester :

18. N. P't.....	300
25.	420
29. Sub. 12, N. E. P't.....	16
33. S. P't.....	100
38. S. W. cor., 35 c. N. and S. and 20 c. E. and W.	70

WARRENSBURGH TRACT.

Warrensburgh :

3.	201
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APPENDIX C.

LIST OF STATE LANDS

ACQUIRED BY SALE OF 1881.

CLINTON COUNTY.

STATE LANDS. — TITLE FROM 1881 TAX SALE.

Total number of acres 11,402.78.

DETAILED STATEMENT.

DUERVILLE PATENT.

Town and lot.	Area in acres.
Altona :	
21.	250
Dannemora :	
26. E. P't, 175 a. b'd W. by Wm. Vear's $41\frac{1}{3}$ a. and T. Defon's or Lafere's $33\frac{2}{3}$ a. ex. 91 a. E. part thereof.....	84
Beekmantown :	
29. E. end, 95 a. ex. 52 a. S. P't, and $19\frac{1}{4}$ a. being all 95 a. E. end of lot in S. $\frac{1}{2}$ of N. E. $\frac{1}{4}$, $23\frac{3}{4}$ a. ex. $4\frac{1}{2}$ a. S. end thereof.....	$23\frac{3}{4}$
58. Ex. 25 a. S. E. cor.....	225
Altona :	
76. S. W. $\frac{1}{4}$	$62\frac{1}{2}$
Beekmantown :	
80. N. W. $\frac{1}{4}$	62 ¹

GORES.

STATE GORE BETWEEN OLD MILITARY AND REFUGEE TRACTS.

Town and lot. Area in acres.

Dannemora :

65. Und. $\frac{1}{4}$, heretofore paid by J. M. Davison..... 38 $\frac{13}{100}$

Hockstrosser Lot.

B'd N. by lots 62 and 63 of the Gore between Old
Military and Refugee Tracts, E. by lots 231 and
233 Refugee Tract, S. by lot 5 Pion Patent and
W. by lots 64 and 65 of Gore aforesaid 500

LIVINGSTON PATENT.

Division 5, Hart Tract.

Peru :

2. 75 $\frac{1}{4}$
3. 75 $\frac{1}{4}$

Division 8, Slocum Tract.

Black Brook :

19. 100

MAUL'S PATENT.

Ausable :

196. B'd N. and E. by land formerly of Earl Pierce,
S. by Ausable river and W. by School House
Lot and lands sold in 1841 by Martin Pope to
Hugh McClerkin. 16

OLD MILITARY TRACT.

Township 3.

Black Brook :

17. Sub. 4..... 85
24. Ex. 145 a. b'd N. 43 c. 25 l. by a line running S.
89° E. from a point on the W'ly line of lot
29 c. 10 l. N. from the centre of the Port Kent
and Hopkinton turnpike to the Saranac River,
E'ly by said river, S. 2 c. by a line par'l with
the N. line of lot, and W. 71 c. 10 l. by lot line. 708
26 N. E. cor., square 113
72. S. E. cor., 125 a., b'd N. by S. line of Moses
Perry's land and by a continuation E. of said
S. line to E. line of lot, and W. by John Mus-
grove's 50 a., ex. 10 a. S. E. cor. thereof..... 115

Township 4.

10. Sub. 2..... 100
10. Sub. 7..... 100

Township 4 — continued.

Town and lot.

Area in acres.

Saranac :

48. B'd N. by J. Farrell, E. by Hanlon, S. by lot line, and W. by Caffee	17
88. N. $\frac{1}{2}$	320

Township 6.

Clinton :

34. N. W. cor., 94 r. wide N. and S., and 120 r. long E. and W.....	70
48. On N. line 118 r. W. from N. E. cor., 20 r. long N. and S., and $9\frac{1}{2}$ r. wide E. and W.....	$1\frac{3}{8}$
51. On W. line 160 r. N. from S. W. cor., 100 r. wide N. and S., and 106 r. long E. and W....	66
51. Sixty r. E. from W. line and 18 r. S. from centre line of lot, 142 r. long N. and S., and 38 r. wide E. and W.....	33
55. S. W. cor., 220 r. wide N. and S. and 320 r. long E. and W., 440 a., ex. 340 a. S. P't thereof, b'd N. by line par'l with and 152 r. S. from N. line of lot.....	100

PION PATENT.

Saranac :

4. B'd N. by centre, E. by Douglass, S. by line, and W. by J. Dwyre.....	25
--	----

REFUGEE TRACT.

420 a. Lots.

Altona :

87.	420
161.	420
185. All S. of turnpike, of 70 a. E. side of lot	46
191. E. $\frac{1}{2}$	210
223. N. P't of N. E. $\frac{1}{4}$	51
223. S. P't of 51 a. N. P't of E. $\frac{1}{4}$	$25\frac{1}{2}$

Plattsburgh :

251. At Cadyville, owned by James Norcross, b'd N. by centre of plankroad, E. by Mike Sullivan, and S. and W. by Basil David, and being 2 c. 62 l. wide N. and S., and 3 c. 17 l. long E. and W.....	$\frac{83}{100}$
251. Sub. 1, in the N. E. cor. of lot, 12 r. wide E. and W., b'd S. by the centre of the highway leading in 1848 from Cadyville to Saranac, and W. by a line par'l to E. line of lot.....	$4\frac{1}{2}$

ESSEX COUNTY.

Total number of acres 24,994.76.

DETAILED STATEMENT.

ESSEX TRACT, HENRY SURVEY.

Town and lot.	Area in acres.
Jay :	
142.	176
168.	160
Keene :	
181.	160
185.	172
222.	160
<i>Hoffman Township.</i>	
Schroon :	
1. Ex. 100 a. S. W. cor.....	150
1. S. W. cor., 100 a. ex. S. W. $\frac{1}{4}$ of lot.....	37 $\frac{1}{2}$
3. Ex. und. $\frac{1}{5}$ p'd by T. E. Davis and und. $\frac{1}{5}$ p'd by E. O'Comar.....	150
5. Und. $\frac{1}{2}$ formerly paid by Finch, Pruyn and Co..	125
9. Ex. 10 a., being S. W. cor. 89 a. ex. 79 a. S. W. cor. thereof.....	240
10.	250
58.	250
74. E. $\frac{1}{2}$ ex. 75 a. N. P't thereof.	50
81. All in Schroon.....	125
93. S. W. P't.....	120
Minerva :	
94. N. $\frac{1}{2}$ ex. 45 a. W. P't and 35 a. N. P't of rem..	45

IRON ORE TRACT.

Town and lot.

Area in acres.

Elizabethtown :

77. Ex. and $\frac{1}{3}$ p'd by Albany and Rensselaer Iron and Steel Co.....	106 $\frac{2}{3}$
78. S. $\frac{1}{2}$	72
80.	110
105. All W. of Highway.....	19
105. Ex. 236 a. E. P't and 19 a W. of Highway.....	19
106.	31
205. S. E. $\frac{1}{4}$ ex. und. $\frac{1}{4}$ thereof paid by Hartwell.....	30 $\frac{3}{4}$
218.	50
221.	115

JAY TRACT.

Wilmington :

29.	429
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MAUL'S PATENT.

Chesterfield :

106. N. $\frac{1}{2}$	100
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NORTH RIVER HEAD TRACT.

North Hudson :

44.	160
83. All in North Hudson.....	80

OLD MILITARY TRACT.

Townships 1 and 2, Richards' Survey.

Keene :

51. All in Keene.....	416
52. Same.....	514 $\frac{3}{4}$

Wilmington :

54. E. $\frac{1}{3}$ of W. $\frac{1}{2}$	167
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Township 11.

St. Armand :

45. N. $\frac{1}{2}$ and S. E. $\frac{1}{4}$	120
--	-----

North Elba :

78. S. W. $\frac{1}{4}$	40 $\frac{3}{4}$
114. N. W. $\frac{1}{4}$	40
136. Same.....	30
137. S. $\frac{1}{2}$ and N. E. $\frac{1}{4}$	150
138. N. $\frac{1}{2}$	80
139. N. E. $\frac{1}{4}$ and S. W. $\frac{1}{4}$	80

Township 11 — continued.

Town and lot.	Area in acres.
175. N. E. $\frac{1}{4}$	40
177. W. $\frac{1}{2}$	50
St. Armand.	
181. W. side 35 c. wide, 105 a., ex. 100 a. W. side thereof.....	5
185. N. E. $\frac{1}{4}$	75
North Elba :	
198. Und. $\frac{2}{3}$ of S. E. $\frac{1}{4}$ heretofore p'd by Amanda Lyon.....	32 $\frac{1}{2}$
253. S. W. $\frac{1}{4}$	40
St. Armand:	
324.	160

Township 12, Richards' Survey.

North Elba :	
2. Sub. 1, ex. N. W. $\frac{1}{4}$	123
10. Sub. 3, ex. und. $\frac{1}{6}$ p'd by David Jones, und. $\frac{1}{6}$ p'd by Chas. N. Williams and und. $\frac{3}{12}$ p'd by Oliver Abel.....	82 $\frac{1}{2}$
10. Sub. 4, ex. und. $\frac{1}{6}$ p'd by David Jones, und. $\frac{1}{6}$ p'd by Chas. N. Williams, und. $\frac{3}{12}$ p'd by Oliver Abel and und. $\frac{1}{6}$ p'd by Chas. H. Faxon,	44 $\frac{1}{2}$
32. N. $\frac{1}{2}$, ex. S. E. $\frac{1}{4}$ of N. W. $\frac{1}{4}$	275 $\frac{3}{16}$
33. N. E. $\frac{1}{4}$ of N. E. $\frac{1}{4}$	38 $\frac{7}{8}$

Thorn's Survey.

North Elba :	
5. S. E. $\frac{1}{4}$	40
6. Same.....	40
11. N. E. $\frac{1}{4}$ and S. W. $\frac{1}{4}$	80
21. N. E. $\frac{1}{4}$	40
28. N. E. $\frac{1}{4}$	40
31. N. $\frac{1}{2}$	80
48. Ex. N. E. $\frac{1}{4}$	120
55. S. W. $\frac{1}{4}$	40
62. S. E. $\frac{1}{4}$	40
66. N. W. $\frac{1}{4}$	40
69. S. W. $\frac{1}{4}$	40
83. Same.....	40
120. W. $\frac{1}{2}$	80
121. N. W. $\frac{1}{4}$	40
127.	160
128.	160
132. S. E. $\frac{1}{4}$	40
140. N. W. $\frac{1}{4}$	40
141. S. E. $\frac{1}{4}$	40
142. Same.....	40

PARADOX TRACT.

Town and lot.	Area in acres.
Ticonderoga :	
22.	164
23.	164
25.	164
North Hudson :	
399.	12
419.	138 $\frac{4}{10}$
Moriah :	
422.	138 $\frac{4}{10}$
423.	138 $\frac{4}{10}$

ROARING BROOK TRACT.

Elizabethtown :	
5. All in Elizabethtown, 106 a., ex. 100 a. E. P't thereof	6
27.	281
28. All in Elizabethtown, 131 a. ex. 100 a. E. P't thereof	31
Keene :	
38.	284
Elizabethtown :	
42. All in Elizabethtown, 134 a. ex. 100 a. E. P't thereof	34
43.	284

TOTTEN AND CROSSFIELD'S PURCHASE.

*Township 14, Pond's Survey.*North $\frac{1}{2}$ and South East $\frac{1}{4}$.

Minerva :	
6.	160
19.	160
62.	168
77.	166
81.	160
87.	160
88.	160
93.	160
101.	160
102.	240
103.	198
104.	132

Township 16.

Town and lot.	Area in acres.
16. N. E. $\frac{1}{4}$	250
17. Same.....	250
21. Ex. und. $\frac{1}{2}$ p'd by Julia A. Kent.....	500
24. W. $\frac{1}{2}$	500

Township 25.

BAILEY'S PATENT.

30.	117
64.	100
69.	100
71.	122
72.	100
73.	100
78.	100

Thorn's Survey.

2.	97
3.	98
4.	130
6.	105
7.	90
8.	90
9.	120
10.	120
11.	140
12.	120
13.	120
14.	160
17.	120
19.	160
21. Ore Bed Lot.....	140
25.	160
29. Ex. 24 a. S. E. cor., 8 c. wide N. and S. and 30 c. long E. and W.....	136
30. Ex. 36 a. S. P't., 9 c. wide N. and S. and 40 c. long E. and W.....	124
31.	140

Township 26.

15.	200
16.	200
17.	200
33.	160
36. E. P't.....	92
49. Ex. 75 a. W'ly P't.....	165
71.	200

Township 26 — continued.

Town and lot.	Area in acres.
76.	244
96. Ex. $73\frac{1}{2}$ a. S. W. cor.; $30\frac{1}{2}$ c. long N. and S. and 24 c. wide E. and W.	$209\frac{1}{2}$
96. S. W. cor. $30\frac{1}{2}$ c. long N. and S., and 24 c. wide E. and W.	$73\frac{1}{2}$
103. All of 162 a. W. P't contained in 25 a. S. P't of 75 a. N. P't. of lot.	$17\frac{1}{2}$
103. All of 162 a. W. P't. contained in 25 a. S. P't of 100 a. N. P't of lot.	$17\frac{1}{2}$
105. N. W. P't.	50
106. S. P't.	76
109. All not previously owned by State.	111
110. S. P't.	36
114. E. $\frac{1}{2}$	118
117. S. P't.	100

Township 27, Richard's Survey.

Newcomb :

33.	160
35.	160

Township 45.

Keene :

38. All in Keene.	480
39. All in Keene of 100 a. S. E. cor. of lot.	40

Township 49.

North Hudson :

12. Ex. 250 a. N. E. cor. and 253 a. S. E. cor.	547
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Township 50.

Newcomb :

60 and 61. All in Newcomb.	190
65. Same.	131
91.	85
107. Ex. 50 a. S. W. cor.	89

TRACT WEST OF ROAD PATENT.

North Hudson :

7.	$68\frac{1}{2}$
33.	$168\frac{4}{10}$
34.	160
36.	160
37.	160
40.	160
54.	160

Tract west of Road Patent — continued.

Town and lot. Area in acres.

Schroon :

73.	.....	160
74.	.....	160
75.	.....	160
82.	.....	160
91.	.....	116 $\frac{1}{10}$
93.	.....	120
101.	.....	160
105.	.....	115
113.	Und. $\frac{1}{2}$ heretofore p'd by R. Seaman.....	60
117.	.....	160
134.	Ex. und. $\frac{1}{10}$ p'd by T. E. Davies for 1875, formerly p'd by A. Smith and und. $\frac{1}{10}$ p'd by E. O. Comar.....	145 $\frac{92}{100}$
138.	.....	96
139.	.....	50 $\frac{8}{10}$
141.	.....	83
142.	.....	74 $\frac{8}{10}$
147.	.....	86 $\frac{1}{2}$
148.	.....	160

Minerva :

149.	.....	157
151.	141
152.	182
156.	144
163.	167
166.	167

TREMBLEAU TRACT.

Chesterfield :

15. E. P't.....	50
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FRANKLIN COUNTY.

Total number of acres 9, 884.75.

DETAILED STATEMENT.

GORE EAST OF TOWNSHIP 9, OLD MILITARY TRACT 1.

Town and lot.	Area in acres.
Bellmont :	
9.	122

MACOMB'S PURCHASE.

GREAT TRACT 1.

Township 11.

Brandon :	
1. Sub. 2	48

Township 12.

Duane :	
4. B'd N. by Widow Berrey's land and N. E. cor. of lot, or line par'l to S. line of lot, E. and W. by lot lines and S. by Mordecai Ladd's lands .	199
9.	619
12. B'd N. by E. or E. M. Ladd's land, E. by M. or E. M. Ladd's land, S. by H. and J. Kerry's land and W. by lot line	63
23. Sub. 3	115
25. Ex. 100 a. N. E. cor.	560
36. S. W. cor.	100

Township 14.

South $\frac{1}{2}$ and North East $\frac{1}{4}$, Nathan Ward's Sub-
division.

Brandon :	
11. S. $\frac{1}{4}$	33
12. S. $\frac{1}{2}$ of N. W. $\frac{1}{4}$	35 $\frac{1}{2}$
14. N. $\frac{1}{4}$	38

Township 14 — continued.

Town and lot.	Area in acres.
16. N. $\frac{1}{2}$ of S. $\frac{2}{5}$	35 $\frac{2}{10}$
36. W. $\frac{1}{2}$, ex. N. $\frac{1}{3}$ and S. $\frac{1}{3}$ thereof	42 $\frac{1}{3}$
44. N. $\frac{1}{4}$	40 $\frac{3}{4}$
59. N. $\frac{2}{3}$	80
72. N. $\frac{1}{2}$ of S. $\frac{2}{5}$	42 $\frac{2}{10}$
74. Same	36 $\frac{2}{10}$
108. N. $\frac{1}{5}$	36

Township 15.

North East $\frac{1}{4}$.

Duane :

4. E. P't	345
11.	469
North West $\frac{1}{4}$.	
4.	119
7.	163 $\frac{1}{2}$
14.	163
16.	117

South West $\frac{1}{4}$.

Brighton :

42. W. $\frac{1}{2}$	50
75.	103

Township 23.

South East $\frac{1}{4}$.

Brandon :

E. end of 1,240 a. S. end	300
South West $\frac{1}{4}$.	
N. E. cor. 80 c., long N. and S. and 49 $\frac{55}{100}$ c., wide E. and W.	396

Township 27.

North West $\frac{1}{4}$.

Harriettstown :

Lot 1, 390 $\frac{1}{4}$ a. and W. $\frac{1}{2}$ of lot 3, 195 $\frac{1}{2}$ a. in 1,561 a. W. end of 1,961 a. N. P't	585 $\frac{3}{8}$
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OLD MILITARY TRACT.

Township 8.

Bellmont :

85. All not contained in 250 a. S. E. cor. square, of all ex. 240 a. N. W. cor.	390
87. E $\frac{1}{2}$	320

Township 9.

Town and lot.	Area in acres.
81. N. E. $\frac{1}{4}$	40
Franklin :	
102. N. $\frac{1}{3}$ of W. 120 a.	40
186. N. E. $\frac{1}{4}$	45
191. S. E. $\frac{1}{4}$	40
206. W. P't in Tanner's Pond	60
213. N. $\frac{1}{2}$, and S. W. $\frac{1}{4}$	120
255.	175
Bellmont :	
273.	160
274.	160
Franklin :	
295.	200
Bellmont :	
305. Ex. 25 a. N. W. cor.	135
309. S. W. $\frac{1}{4}$	40
341. E. $\frac{1}{2}$	80
342.	85
343.	107
346. Ex. 40 a. N. E. cor. 20 c. square and 80 a. S. P't b'd N. by a line par'l to S. line	79 $\frac{2}{10}$
Franklin :	
350. B'd beg. in S. W. cor. of lot, th. N. 20 c., th. N. 50° E. 22 c., 33 l., th. S. 40° E. 30 c., th. S. 50° W. 8 c., 33 l., to S. line of lot and th. W. on S. line to beg.	69 $\frac{1}{4}$
354.	220 $\frac{6}{10}$
356. S. W. $\frac{1}{4}$	42 $\frac{65}{100}$

Township 10.

83. W. P't.	108
88.	168
116.	200
153.	200
191.	200
195. S. $\frac{1}{2}$ of 80 a. E. P't	40
212.	200
285 N. W. $\frac{1}{4}$	50
290. Ex. S. $\frac{1}{3}$ of N. W. $\frac{1}{4}$ 16 $\frac{2}{3}$ a. and 43 $\frac{1}{3}$ a. being so much of the S. E. $\frac{1}{4}$ as is not contained in S. $\frac{1}{3}$ of W. 120 a.	140
323. N. $\frac{1}{2}$	100

FULTON COUNTY.

Total number of acres 2, 737.12.

DETAILED STATEMENT.

CHASE'S PATENT.

Town and lot	Area in acres.
Bleecker :	
41.	100
42.	100
44. W. P't.....	50
52. E. P't.....	50
56.	100
69.	100
Mayfield :	
101. All in Mayfield.....	10
Bleecker :	
103. All in Bleecker	15

GLEN, BLEECKER AND LANSING PATENT.

Mayfield :	
4. Sub. 2.....	99
11. Sub. 3.....	105
11. Sub. 4.....	105
11. Sub. 7.....	100
11. Sub. 9.....	105
11. Sub. 11.....	100
11. Sub. 12.....	100
Bleecker :	
15. Sub. 1.....	125
Mayfield :	
16. Sub. 1.....	100

Glen, etc., Patent — continued.

Town and lot.

Area in acres.

Bleecker :

33. E. P't.....	100
43. Sub. 3 ex. $74\frac{1}{4}$ a. E. P't.....	$24\frac{3}{4}$
43. Sub. 4 ex. $109\frac{3}{4}$ a. E. P't.....	$36\frac{1}{4}$
43. Sub. 8, ex. $74\frac{1}{4}$ a. E. P't.....	$24\frac{3}{4}$

JERSEYFIELD PATENT.

Stratford.

32. Sub 5. E. P't of W. $\frac{1}{2}$	123
66. S. E. $\frac{1}{4}$	250
90. N. W. cor. 200 a. ex. 160 a. N. W. cor. thereof.	40

LOTT AND LOW'S PATENT.

Caroga :

11. Sub. 2, N. P't b'd N. by Mann E. and W. by lot lines and S. by stone.....	34
11. Sub. 3. S. P't 120 a. ex. $80\frac{1}{8}$ a. S. P't thereof b'd N. by I. T. Hudson.....	$39\frac{7}{8}$

Stratford :

29. S. W. cor.....	40
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MAYFIELD PATENT

Bleecker :

53.	100
54. ..	130
55. W. P't in Bleecker.....	38
66. All in Bleecker.....	$11\frac{1}{2}$
67. All in Bleecker, 42 a. ex. 30 a. W. P't thereof..	12
67. W. P't in Bleecker.....	30
91. S. P't.....	33

Caroga :

100. S. E. cor... ..	96
102. S. E. $\frac{1}{4}$	50
103. N. end.....	60

[Assem. Doc. No. 126.] 38

HAMILTON COUNTY.

Total number of acres 93, 316.91.

DETAILED STATEMENT.

ARTHURBORO PATENT. TIFFT (J. G.) TRACT.

Town and lot	Area in acres.
Morehouse :	
2. E. P't.....	100

Benson Township.

Benson :	
10. S $\frac{1}{2}$	80
19. N. P't.....	150
Arietta :	
27.	160
30.	214
32.	160
33.	160
34.	160
Benson :	
42.	160
44.	160
63. W. $\frac{1}{2}$	80
84. All in Benson.....	80
Arietta :	
84. All in Arietta.....	80
87.	160
88.	160
Benson :	
95. All in Benson.....	80
Arietta :	
95. All in Arietta.....	80

Benson Township — continued.

Town and lot.	Area in acres.
Benson :	
97.	160
118. Ex. 30 a. S. E. cor. square.	212
137.	160
152.	160
153.	160
154.	160
169.	154
182.	160
183.	160
196. All in Benson.	80
Arietta :	
196. All in Arietta.	80
Benson :	
211.	160
213.	160
215.	160
226.	160
227.	160
228. S. W. cor.	25
229.	160
243.	160
261.	160
267.	160
272.	160
273. E. side.	40
274.	160
275.	160
276.	160
281.	160
285.	160
286.	160
288.	160
295.	160
305.	160
308.	160
310. ..	160
311.	160
317.	160
318.	160
319.	160
324. Ex. 25 a. N. E. cor. square.	135
Wells :	
334.	160
335.	160

Benson Township — continued.

Town and lot.	Area in acres.
337.	160
340.	160
341.	160
344.	160
347.	160
350.	160
374. N. W. cor.....	90

BERGEN'S PURCHASE.

PATENT No. 2.

All S. of W. branch of Sacandaga river, 410 a. ex.
50 a. N. W. cor. thereof, resident land of Seth
Pratt; 25 a. b'd beg. at a beech tree at S. W.
cor. of lands of Elias Kellogg, th. N. $62\frac{1}{2}^{\circ}$ E.
13 c. 50 l. to th. West river, th. S. $27\frac{1}{2}^{\circ}$ E. 18 c.
52 l. to a maple sapling, th. S. $62\frac{1}{2}^{\circ}$ W. 13 c. 50 l.
to a stake and th. N. $27\frac{1}{2}^{\circ}$ W. 18 c. 52 l. to beg.;
150 a. on W'ly line of Patent, 19 c. from S. W.
cor. thereof, 41 c. wide N. and S'ly, b'd N. E'ly
by the Vorse Creek branch of Sacandaga river
and being 20 c. long on N'ly line and 67 c.
on S'ly line; 50 a. on S'ly line of Patent, 57 c.
E'ly from S. W. cor. thereof, 20 c. wide N'ly and
S'ly, b'd N. E'ly by W. branch of Sacandaga
river and being 10 c. long on N'ly line and 39 c.
on S'ly line and 66 a. b'd N. E'ly by W. branch
of Sacandaga river, S'ly by Vorse Creek and S.
W'ly by $25\frac{8}{10}$ a. of E. Kellogg and N. W'ly by
land of Seth Brott and E. Kellogg..... 69

PATENT No. 7.

- 1, 2, 3 and 4. Sub. 4, Calvin Osborn lot, b'd N. by
W. G. Lobdell's lot, E. by lot 9, S. by lands of R.
G. Ostrander and W. by Sacandaga river..... 100
- 1, 2, 3 and 4. Sub. 9, b'd N. by Sub. 8, S. by Patent
line and W. by Calvin Osborn's lot..... 100

CHASE'S PATENT.

Benson :

- 91. E. P't, in Benson 15
- 104. All in Benson 50

GLEN, BLEECKER AND LANSING PATENT.

- 7. S. P't..... 666

LAWRENCE PATENT

Town and lot.	Area in acres.
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Arietta :

2.	635
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Morehouse :

9. All of 70 a. square, in N. W. cor. of lot, contained in 157 a. all in Morehouse.....	55 $\frac{4}{10}$
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Arietta :

25.	635
29.	635
43. Ex. 100 a. E. side and 100 a. S. W. cor.....	435

Morehouse:

46. Ex. 157 a. W. P't.....	618
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MOOSE RIVER TRACT.

Township 3.

65. All in Morehouse 80 a. ex. und. $\frac{2}{3}$ p'd by P. J. Munn	26 $\frac{2}{3}$
79. Ex. und. $\frac{2}{3}$ heretofore p'd by Est. of P. J. Munn.	56
91. Same.....	56
103. Same.....	56

Township 4.

32. Ex. und. $\frac{1}{4}$, p'd by T. S. Gold.....	120
33. Same.....	120
34. Same.....	120
39. Same.....	120
40. Same.....	120
41. Same.....	120
64. Ex. und. $\frac{1}{4}$ of E. $\frac{1}{2}$ p'd by T. S. Gold.....	186 $\frac{3}{8}$
65. Same.....	186 $\frac{3}{8}$
66. Same.....	186 $\frac{3}{8}$
79.	213
83. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn.....	71
84. Same.....	71
87. Ex. und. $\frac{1}{3}$ p'd by C. L. Benedict	142
88. Rem. water, ex. und. $\frac{1}{3}$ p'd by C. L. Benedict ..	113 $\frac{1}{3}$
97. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn	71
98. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn, and und. $\frac{1}{3}$ of W. $\frac{3}{4}$ p'd by C. L. Benedict	17 $\frac{3}{4}$
99. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn.....	71
104. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn, and und. $\frac{1}{3}$ of N. $\frac{1}{2}$ p'd by C. L. Benedict	35 $\frac{1}{2}$

Township 4 — continued.

Town and lot.	Area in acres.
105. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn.....	71
106. Same.....	71
107. Ex. und. $\frac{2}{3}$ p'd by Est. of P. J. Munn, and und. $\frac{1}{3}$ of E. $\frac{1}{2}$ p'd by C. L. Benedict.....	35 $\frac{1}{2}$

Township 9.

Arietta:

3. N. E. P't	25
144. Ex. 200 a. N. P't	70

Lake Pleasant:

149. S. E. cor. of E. $\frac{1}{2}$	75
150. W'ly $\frac{1}{2}$ of 100 a. N., or N. W. P't.....	50

OXBOW TRACT.

13. Ex. 50 $\frac{6}{10}$ a. N. W. cor., 22 c. square	269 $\frac{4}{10}$
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Wells:

32. All in Wells.....	42
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Arietta:

40.	309
41.	309
43.	154
44. Ex. 25 a. N. E. cor.....	130
50. All in Arietta	40

Wells:

50. All in Wells	115
52. All in Wells.....	100

Lake Pleasant:

53. All in Lake Pleasant.....	130
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Wells:

53. All in Wells.....	25
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Arietta:

68.	154
76.	154
110.	154
111.	154
128. P't water	154
129.	154
130.	154
131.	154
144.	154
191.	154
245.	154

Oxbow Tract — continued.

Town and lot.	Area in acres.
248.	137
250.	155
269.	179
292.	233

PALMER'S PURCHASE.

GENERAL ALLOTMENT.

Wells :

1. Sub. 2.....	100
5. N. W. cor. of, all in Wells	200
5. All in Wells, ex. 200 a. N. W. cor., and 200 a. Sub.'s 8 and 9.....	350
8. Sub. 1.....	100
8. Sub. 3.....	100
19. All in Wells	50

REAR DIVISION ; LEFFERT'S TRACT.

North $\frac{1}{2}$.*Range 3.*

7.	100
8.	100

TOTTEN & CROSSFIELD'S PURCHASE.

*Township 1.*South East $\frac{1}{4}$.

VAN WAGONER TRACT.

Allotment 3.

7.	68
9.	80
10.	80
12.	145

South West $\frac{1}{4}$.

3.	193
4.	204
5. W. $\frac{1}{2}$	142 $\frac{1}{2}$
6.	326 $\frac{1}{2}$
18.	227
19.	279
20.	329

Township 2.

Jones' Map.

Town and lot.

Area in acres.

Lake Pleasant :

10. N. W. cor.....	91
11. Ex. 50 a. N. end.....	219
32 Ex. 100 a. S'ly side, R. R. land.....	169
33. Ex. 85 a. S. P't.....	184

Township 3.

Arietta :

1. N. E. $\frac{1}{4}$	37 $\frac{1}{2}$
21. S. $\frac{1}{2}$, Ex. 25 a. E. end thereof.....	50
40. All in Arietta.....	75

Lake Pleasant :

40. Ali in Lake Pleasant.....	75
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Arietta :

43. Ex. 30 a. N. W. cor., square.....	120
46. S. W. $\frac{1}{4}$	37 $\frac{1}{2}$
48.	150

Lake Pleasant :

55. S. W. $\frac{1}{4}$	37 $\frac{1}{2}$
78. N. E. $\frac{1}{4}$	37 $\frac{1}{2}$

Arietta :

86. W. end of S. $\frac{1}{2}$	5
95. S. W. $\frac{1}{4}$	37 $\frac{1}{2}$

Lake Pleasant :

96. All in Lake Pleasant, ex. 38 a. S. E. cor. thereof.	32
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Arietta :

104. Ex. 15 a. S. W. cor., sq.....	135
105. Same.....	135
106. Ex. 20 a. S. E. cor., sq.....	130
107. N. E. $\frac{1}{4}$, and W. $\frac{1}{2}$, ex. 10 a. S. end thereof.....	102 $\frac{1}{2}$
110. Ex. 20 a. N. E. cor., sq.....	130
111. Ex. 20 a. S. E. cor., sq.....	130
112. E. $\frac{1}{2}$ and N. W. $\frac{1}{4}$, ex. 10 a. N. W. cor., sq.....	102 $\frac{1}{2}$
113. Ex. 10 a. N. E. cor., sq.....	140
116. Ex. 10 a. N. W. cor., sq.....	140
117. Ex. 10 a. N. E. cor., sq.....	140
118. Ex. 20 a. N. W. cor., sq.....	130
123. All in Arietta, 75 a. ex. 1 a. S'ly end thereof...	74
125. Ex. 15 a. S. W. cor., sq.....	135
131. N. W. $\frac{1}{4}$, and S. E. $\frac{1}{4}$ ex. 2 a. N. W. cor., sq.....	73
132. Ex. 10 a. N. E. cor., sq.....	65
133. Ex. 15 a. N. E. cor., sq.....	285

Township 5.

Town and lot.

Area in acres.

Morehouse:

All in Morehouse of 1,000 a. und. in N. E. $\frac{1}{4}$ of Township heretofore p'd by J. W. and J. R. Van Alstyne.....	808
All of E. $\frac{1}{2}$ in Morehouse, 6,903 a. ex. 808 a. as above and ex. 640 a., Gospel, School and Literature lands.....	5,455
All of W. $\frac{1}{2}$ in Morehouse 11,745 a. ex. 947 a., being so much of lot 4, Nivens Tract, as is in said town, and 640 a. Gospel, School and Literature lands.....	9,650 $\frac{3}{4}$

Township 6.

Lake Pleasant:

24. All in Lake Pleasant.....	89
30. Same.....	150
31. Same.....	150

Township 7.

All of N'ly $\frac{1}{4}$ and S'ly $\frac{1}{2}$ in Lake Pleasant, ex. 1,150 a. all of W. $\frac{1}{2}$ of N. $\frac{1}{4}$ in Lake Pleasant; 2,100 $\frac{1}{2}$ a. S. P't of S. E. $\frac{1}{4}$, 87 $\frac{52}{100}$ c. wide N. and S.; 750 a. N. Pt. of S. W. $\frac{1}{4}$, 31 $\frac{1}{4}$ c. wide N. and S.; and 1,575 a. N'ly $\frac{1}{2}$ of N. E. $\frac{1}{4}$; ex. und. $\frac{1}{2}$ of all thereof, formerly Adirondack Co. lands	4,874 $\frac{3}{4}$
Lots 8, 9, and 10 in a tract of 1,000 a. E'ly end of S'ly $\frac{1}{2}$ of N'ly $\frac{1}{2}$ of Township.....	300

Township 8.

North $\frac{1}{2}$.

5.	260
6.	260
7. S. end.....	50
9. Und. rem. Adirondack Co. lands.....	30
11. Same	30
12. Same	30
46. Same	25

South East $\frac{1}{4}$.

2.	125
3.	125
6.	125
7.	125

South West $\frac{1}{4}$.

SUCKLEY TRACT.

Town and lot.	Area in acres.
Being what remains of S. W. $\frac{1}{4}$ of Township after ex. 2,500 a. S. W. cor. thereof and 320 a., being so much of the Literature lot as is contained therein.....	3,480

Townships 10 and 29.

Wells :	
10. Ex. 450 a. N'ly end and 450 a. S'ly end.....	143
10. S'ly end	450

Township 19.

Indian Lake :	
N. E. $\frac{1}{4}$, ex. 4,959 a. E. P't thereof and 320 a. Gospel and School lands.....	1,021
E. P't of N. E. $\frac{1}{4}$ 1,325 a. and N. W. $\frac{1}{4}$ ex. 320 a. Gospel, School and Literature lands	7,305

Township 21.

Long Lake :	
32. E. $\frac{1}{2}$	100
44. N. E. P't.....	150
123. E. P't.....	100

Township 22.

South $\frac{1}{2}$.

8. S. P't	54
9.	158
64. All N. and E. of Big Brook.....	149

Township 23.

(Including Triangle.)

1. Ex. 75 a. N. E'ly end	73
--------------------------------	----

Township 32.

Indian Lake :	
S. E. cor., square, 5,800 a., ex. water, so much of Literature lot as is contained therein and ex. an undivided $\frac{2}{3}$ of remainder p'd by Zenas Van Dusen and S. G. Goodman.....	1,811 $\frac{1}{4}$

Township 33.

East Part of North $\frac{1}{2}$, Allotted.

28. Und. $\frac{1}{2}$, rem. Adirondack Co's land.....	80
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Township 34.

Ex. 4,000 a. S'ly end of Township; 1,280 a. Gospel, School and Literature lots; 100 a. on N.

Township 34 — continued.

Town and lot.

Area in acres.

side of Middle Eckford Lake, known as the Ordway place "b'd beg. at the outlet of said Lake on the N. side thereof, th. N'ly 25 c., th. E'ly 40 c., th. S'ly 25 c. to Lake shore and th. W'ly along said shore 40 c. to beg.;" and also about 6,245 a. covered by water 13,575

Township 38.

N. E. cor., 250 a., and 1,900 a., being Lots 6, 7, 26, 38, 43, 49, 55 and 56 2,160
23. 208

Township 41.

All in Long Lake, 21,474 a., ex. 2,583 $\frac{1}{2}$ a. N. P't of N. E. $\frac{1}{4}$, b'd S. by a line par'l to N. line; 669 a. W. end of all that remains of N. E. $\frac{1}{4}$ after ex. 4,783 a. N. P't thereof; 3,455 a. W. end of S. E. $\frac{1}{4}$; 5,931 a. S. W. $\frac{1}{4}$; 937 a. und. (subsequently claimed by the Adirondack Co.) in that part of the N. W. $\frac{1}{4}$ lying in Hamilton Co., and not covered by the Gospel and School lots; and 420 a., being so much of Gospel and School lots as is contained in rem 7,478 $\frac{1}{2}$
Und. 937 a. (subsequently claimed by the Adirondack Co.) in that part of the N. W. $\frac{1}{4}$ lying in Hamilton County and not covered by the Gospel and School lots, ex. und. $\frac{1}{2}$ Adirondack Co.'s land 468 $\frac{1}{2}$
W. end of N. E. $\frac{1}{4}$, after ex. 4,783 a. N. P't thereof, 669 a.; W. end of S. E. $\frac{1}{4}$, 3,455 a.; and S. W. $\frac{1}{4}$, ex. 5,655 a. W. P't thereof, 276 a.; in all 4,400 a. ex. 618 a. thereof in Gospel, School and Literature lots 3,782

Township 50.

12 and 13. 146
14 and 15. 190
37 and 38. 143
47. Rem. water 70
76. All in Long Lake 30
89. Same 25

VROOMAN'S PATENT.

Morehouse:

10. 200
11. 200
12. All in Morehouse 66
17. Same 66
20. Same 66
25. Same 66

HERKIMER COUNTY.

Total number of acres 11,434.89.

DETAILED STATEMENT.

JERSEYFIELD PATENT.

Town and lot.	Area in acres.
Salisbury :	
3. N. E. cor. of N. W. $\frac{1}{2}$	50
Ohio :	
8. All of E. $\frac{1}{2}$ in Ohio, 586 a. ex. $249\frac{82}{100}$ a. being all therein of 250 a. N. E. cor. of lot.....	$336\frac{18}{100}$
Salisbury :	
24. E. $\frac{1}{2}$	525
35. S. E. $\frac{1}{4}$, ex. 50 a. S. side across, and $84\frac{7}{10}$ a. being all not covered by 50 a. S'ly side across, of a $104\frac{6}{10}$ a. parcel on S'ly line of lot, beg. 17 c. 99 l. from S. E. cor. thereof and being 44 c. 50 l. long at right angles to S. line of lot and 23 c. 60 l. wide E'ly and W'ly.....	$127\frac{8}{10}$
38. B'd N. by 200 a. N. end of W. $\frac{1}{2}$, E. by centre line of lot, S. by 300 a. S. p't of W. $\frac{1}{2}$ and W. by lot line.	25
38. N. P't. of E. $\frac{1}{2}$ of N. E. $\frac{1}{4}$, $106\frac{1}{4}$ a. ex. 50 a. b'd. N. by 50 a. N. end thereof and S. by 25 a. S. end of E. $\frac{1}{2}$ of N. E. $\frac{1}{4}$	$56\frac{1}{4}$
38. S. $\frac{1}{2}$ of 50 a. S'ly P't. of 200 a. S. P't of W. $\frac{1}{2}$ of lot.....	25
39. E. $\frac{1}{2}$	525
39. W. $\frac{1}{2}$	525
Ohio :	
40. B'd beg. S. 57° E. 45 c. 75 l. from S. W. cor., th. N. 33° E. 44 c., th. S. 57° E. 24 c. 25 l., th. S. 33° W. 44 c. and th. N. 57° W. 24 c. 25 l. to beg	107

Jerseyfield Patent — continued.

Town and lot.

Area in acres.

Salisbury :

49. N. P't of all in Salisbury, b'd S. by lands of Thos.
E. Proctor, $153\frac{1}{4}$ a. ex. 15 a. N. E. cor. thereof $138\frac{1}{4}$

Ohio :

42. In S. end of E. $\frac{1}{2}$ b'd. N. by lands of Augustis
Christman, E. by lands of Hoxie McNeal, S.
by lot 21 and W. by lands of Hugh Clark.... 166
52. S. W. cor..... 20

Salisbury :

57. S. W. cor., sq., $476\frac{47}{100}$ a. and on W. line adj. afore-
said $476\frac{47}{100}$ a., sq., 15 a..... $491\frac{47}{100}$

Ohio :

82. All in Ohio..... 986

NOBLEBORO PATENT.

New Survey.

Wilmurt :

20.	.....	200
24.	.....	150
46.	.....	150
49.	.....	150
56.	.....	150
67.	.....	150
93.	.....	150
95.	.....	150
101.	Ex. 50 a. E. P't	100
103.	.....	150
115.	.....	150
116.	W. P't	125
117.	.....	150
121.	.....	150
122.	.....	150
130.	.....	150
131.	.....	150
137.	.....	150
138.	.....	150
139.	.....	150
141.	.....	150
143.	.....	150

Old Survey.

48.	.....	300
97.	.....	300
99.	W. end	100

REMSENBURGH PATENT.

Town and lot.	Area in acres.
12. N. $\frac{1}{2}$	250
12. S. $\frac{1}{2}$	250
52. N. $\frac{1}{2}$ of S. $\frac{2}{5}$	100

ROYAL GRANT.

2d Allotment.

Salisbury :

90. B'd N. by H. Ayres and E. and S. by P. Lucy, or P. Locy and W. by Doct. or G. Sweet and J. Murphy	12
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4th Allotment.

Salisbury :

125. S. W. $\frac{1}{4}$	50
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VROOMAN'S PATENT.

Wilmurt :

9. All in Wilmurt 134 a. ex. 60 a. W. end thereof.	7 $\frac{1}{2}$
12. Same	74
13. S. $\frac{1}{2}$ of N. $\frac{1}{2}$	50
17. All in Wilmurt	134
20. Same, 134 a. ex. 60 a. W. P't thereof.....	74
25. All in Wilmurt.....	134
41. All in Wilmurt 134 a. ex. 18 a. N. W. P't thereof.....	116

WATSON'S EAST TRIANGLE.

6. N. W. $\frac{1}{4}$	143 $\frac{1}{2}$
27. Ex. 495 a. N. W. cor., and 102 $\frac{56}{100}$ a. being all of 194 $\frac{3}{100}$ a. E. side, across, not contained in 495 a. square, in N. W. cor. of lot.....	96 $\frac{44}{100}$
29.	658

WOODHULL TRACT.

6. Ex. 2 a. b'd beg. at S. W. cor. of lot, on S. side of Creek, th. E'ly along S. line thereof 17 c., th. N'ly 2 $\frac{36}{100}$ c. to S. side of Little Woodhull Creek, being a triangle, and 49 a. b'd beg. in centre of Little Woodhull Creek 17 c. E'ly from S. W. cor. thereof, th. along centre of Creek N. E'ly 70 c. to E. line of lot, being 7 c. wide, 3 $\frac{50}{100}$ c. on each side of the centre of said Creek.....	549
12. All in Wilmurt.....	166

LEWIS COUNTY.

Total number of acres 3,903.87.

DETAILED STATEMENT.

BOYLSTON PURCHASE.

Township 13.

Town and lot.	Area in acres.
Osceola :	
38. N. W. cor., b'd E. by Griffith and S. by Jackson,	62
69. N, end	25
98. N. W. cor., b'd E. by Hinman and Williams...	120
98. S. W. cor., b'd N. and E. by R. Stewart	62
127.	265
134. B'd N. and S. by Driscoll, and E. and W. by lot lines	83

BRANTINGHAM TRACT.

Greig :	
6.	240
73. B'd N. by W. Taylor, E. by A. Benedict, S. by Johnson and W. by Holmes.....	75
187. E. side	73
188.	236
189.	154 ⁶⁷ / ₁₀₀
Lyonsdale :	
308. B'd N. by Chase, E. and S. by Rogers and W. by Banning.....	14
Greig and Lyonsdale :	
311. S. W. cor., b'd N. by Holcomb and E. by G. H. Brown	50

LYON'S FALLS, VILLAGE OF.

Town and lot.

Area in acres.

Block 1.

West Turin :

2.	$\frac{1}{4}$
6.	$\frac{1}{4}$

Block 2.

3.	$\frac{1}{4}$
4.	$\frac{1}{4}$
7.	$\frac{1}{4}$
13.	$\frac{1}{4}$

Block 3.

1.	$\frac{1}{4}$
7.	$\frac{1}{4}$
19.	$\frac{1}{4}$

Block 4.

3.	$\frac{1}{4}$
6.	$\frac{1}{4}$
10.	$\frac{1}{4}$
29.	$\frac{1}{4}$
30.	$\frac{1}{4}$

Block 5.

10.	$\frac{1}{4}$
11.	$\frac{1}{4}$
14. Ex. und. $\frac{2}{3}$ paid Mrs. Julia L. DeCamp.....	$\frac{1}{2}$

Block 7.

3. N. W. $\frac{1}{2}$ ex. und. $\frac{1}{2}$ p'd by Mrs. Julia L. De Camp.	$\frac{1}{16}$
5. Same	$\frac{1}{16}$

MACOMB'S PURCHASE.

GREAT TRACT 4.

Diana :

337. Ex. 52 a. N. E'ly cor.....	388
338. Ex. 40 a. S. W'ly cor.....	400
906. S. W'ly cor. b'd N'ly by Wm. Hunt and others and E'ly by Hammond and Morse lands.....	50
924. B'd N'ly by lot line, E'ly by Paddock and Judson's and G. W. Leonard's land, S'ly by Paddock and Judson's land and W'ly by Wm. Leonard and Paddock's and Judson's land.....	66
988. B'd N'ly by lot 989, E'ly by Paddock and Jud- son's land, S'ly by highway, and W'ly by F. B. Ward's land.....	46

Great Tract 4 — continued.

Town and lot.	Area in acres.
990. B'd N'ly by lot 991, E'ly by lots 337 and 338, S. by lot 989 and Wm. Seeley's land, and W'ly by Hugh's and Paul's land.....	290
991. S. E. cor. b'd N'ly by La Flewis land, and W'ly by Blanchard's Est. lands.....	120
992. N. E. cor., b'd S'ly by H. Mantle's land, and W'ly by Managhan's or Managan's land.....	170
Triangle in Easterly End.	
1. B'd N'ly by S. H. Beache's, E'ly by Humès, S'ly by lot 2, and W'ly by Beache's land.....	90
2. B'd N'ly by lot 1, E'ly by Hume's, S'ly by Buell and Bartholomew, and W'ly by Buell and Beache's land.....	219

Turnpike Lots.

24. B'd N'ly and S'ly by lot lines, E'ly Z. H. Benton's land, and W'ly Russell Turnpike.....	162
25.	162

Great Tract 5, Chassinees Tract.

Croghan :

1977. Range 4, W., 24. N., N. P't... ..	20
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*Great Tract 6.**Township 1.*

Lewis :

38.	257
[Assem. Doc. No 126.]	40

SARATOGA COUNTY.

Total number of acres 4,687.00.

DETAILED STATEMENT.

GLEN (JOHN) AND 44 OTHERS' PATENT.

Town and lot.	Area in acres.
Edinburgh :	
38. All in Edinburgh.....	150
Corinth :	
38. B'd N. and S. by lot lines, E. by D. Steadman or S. McCarl lot and W. by Town of Edinburgh.	63
39. All in Corinth.....	112
51. Same.....	86
Edinburgh :	
85, 86, 87 and 88. Sub. 6.....	100

KAYADEROSSERAS PATENT.

24th Allotment.

Great Lot 1.

Town of Corinth.

Corinth :	
2. Sub. 2, S. P't.....	100

Great Lot 2.

Town of Corinth.

1. Sub. 1, N. P't, b'd S. by Hewitt, Clark, Spaulding and Andrews, 900 a. ex. 200 a. S. $\frac{1}{3}$ of 600 a. N. end.....	700
2 or B. S. P't, 737 a. ex. 400 a. b'd N. by Chrysler lot, E. by lot line and S. by N. M. Houghton.	337

*Kayaderosseras Patent — continued.**Great Lot 3.*

Town of Corinth.

Town and lot.	Area in acres.
1. Sub. A, S. P't.....	30
1. Sub. B	175
1. Sub. C.....	175
2. Sub. 1, N. P't, b'd S. by Isaac Carpenter or D. Martin.....	503
2. Sub. 2, S. P't, b'd N. by P. or T. Tiffany.....	90

Town of Day.

Day :

2. Sub. 3.....	75
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Great Lot 4.

Corinth :

1. Sub. 2, ex. 160 a. S. end.....	311
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Great Lot 6.

1. Sub. N., N. P't.....	35
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Great Lot 8.

2. B'd N. by E. Holden, E. and W. by lot lines and S. by J. R. Cruse	60
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PALMER'S PURCHASE.

GENERAL ALLOTMENT.

Day :

25. All in Day... ..	66
26. Same.....	290
27. N. P't of all in Day.....	305
30. All in Saratoga Co., ex. 500 a. S. E. cor. thereof.	509

MIDDLE DIVISION.

Great Lot 2.

WEST PART, BRUCE TRACT.

19.	141
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SANDER'S PATENT.

Corinth :

16.	100
31.	87
32.	87

ST. LAWRENCE COUNTY.

Total number of acres 1,248.42.

DETAILED STATEMENT.

LISBON TOWNSHIP.

Mile Square Lots.

Range 6.

Town and lot.	Area in acres.
Lisbon :	
4 and 5. Sub. 1.....	26 $\frac{1}{5}$

MACOMB'S PURCHASE.

GREAT TRACT 2.

Township 1, "*Sherwood.*"

South West $\frac{1}{4}$.

Colton :	
S. W. cor.....	300

Township 4, "*Harewood.*"

South East $\frac{1}{4}$.

N. P't 5,341 a. ex. 5,250 a. N. P't thereof.....	91
--	----

GREAT TRACT 3.

Township 3.

Middle $\frac{1}{3}$, Harison Tract.

Pierrepont :	
8. Sub. 8	40
14. Sub. 6	53
14. Sub. 8	53

Township 9, "Sarahsburgh."

Section 11.

Town and lot.

Area in acres.

Fine :

E. and H. Clark, Cedar Lot, b'd N. by D. Ames,
E. by L. A. Brown, S. by F. or T. Holland and
W. by L. Ames.....

7

BRODIE TRACT.

Township 11.

Pitcairn :

119. S. E. cor., b'd N. by James Thompson and W. by
A. Harris
119. W. P't.....
121. W. P't, b'd E. by E. M. Luther.....
123. E. P't, b'd W. by Martin Luther
178. B'd beg on W. line of lot 10 c. S. from N. W.
cor. thereof, th. S. 15 c., th. E. 36 c. to Havens
Tract, th. N. 15 c. and th. W. 36 c. to beg...

83 $\frac{31}{100}$
104 $\frac{78}{100}$
97
117 $\frac{41}{100}$

54

Township 12.

East $\frac{1}{2}$.

Fine :

30. B'd N. by R. Bebee, E. by Town of Clifton, S.
by Kellogg's land or Colby and W. by Pitcher's
land or Pickett lot.....

68

MORRIS TRACT.

Moss Share.

Macomb :

60.

76

OGDENSBURGH CITY.

Block 49.

Oswegatchie :

ft.

2.

50x75

Block 431.

Whole.

19,000 ACRE TRACT.

Allotment 14.

Depeyster :

7.

77 $\frac{64}{100}$

WARREN COUNTY.

LIST OF LANDS BELONGING TO THE STATE.

Total number of acres 11,669.25

DETAILED STATEMENT.

BRANT LAKE TRACT.

Town and lot.	Area in acres.
Hague :	
25.	160

DARTMOUTH PATENT.

Great Tract, Range 4.

Stony Creek :	
8. S. E. cor.	62½

Range 5.

9.	234
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Range 6.

Thurman :	
7. ...	234

Range 8.

6. S. ½ and N. W. ¼.	176
6. N. E. ¼.	58½

SMALL TRACT.

Range 3.

Stony Creek :	
3. S. W. ½.	117

Range 4.

4.	234
5. N. end.	100

ELLIS PATENT.

Town and lot.

Area in acres.

Hague :

105. W. P't b'd E. by J. and N. or J. S. N. Patchin.	85
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GORE BETWEEN DARTMOUTH PATENT AND TOWNSHIP 11, TOTTEN
AND CROSSFIELD'S PURCHASE.

Thurman :

3.	160
4.	160
5.	160
17.	160
28.	160

GORE BETWEEN TOWNSHIPS 29 AND 31, TOTTEN AND CROSSFIELD'S
PURCHASE.

Johnsburgh :

10.	169
11.	169

GORE SOUTH OF TOWNSHIP 12.

Totten and Crossfield's Purchase, West of River.

13.	164
26.	164

HAGUE TRACT.

Hague :

60.	184½
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Hyde Township.

Thurman :

17. On W. line 26 r. from S. W. cor., 160 r. long N. and S. and 50 r. wide E. and W	50
17. S. W. cor.	50
39. Ex. 50 a. S. E. cor. and 80 a. S. W. cor	370
39. S. W. cor.	80

Warrensburgh :

64. Sub. 4.	61
73. Sub. 3	89
74. Sub. 4.	107
76. Sub. 3.	188
78. Ex. 200 a. W. side	300
78. Ex. 326 a. E. side.	174

JESSUP'S 7,550 ACRE PATENT.

Town and lot.	Area in acres.
Luzerne :	
4. Sub. 1, b'd N. and S. by lot lines, E. by Griffin and W. by Morton	100
4. Sub. 2, b'd N. and S. by lot lines, E. by Griffin heirs and W. by Sam. Ramsey	239
5. Griffin lot, b'd N. and S. by lot lines, E. by Howe and W. by Lewis lot	100

KAYADEROSSERAS PATENT.

23d Allotment.

Great Lot 5.

3. B'd N. by Perkins' lot, E'ly by Geo. Murray, S. by Murray, W. by Barker or Banker farm	50
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LUZERNE TRACT.

11.	75
94. N. $\frac{1}{2}$	75 $\frac{3}{4}$

PALMER'S PURCHASE.

GENERAL ALLOTMENT.

Stony Creek :

11. S. E. cor	30
-------------------------	----

REAR DIVISION.

Great Lot 1.

Stony Creek :

35.	160
37.	122
38.	160

Thurman :

59.	160
60. All in Thurman	102
64. E. $\frac{1}{2}$, (acreage as heretofore)	102
69. Same	102
70.	160

Great Lot 3.

Stony Creek :

N. $\frac{1}{2}$ of 3,150 a. S. P't	1,575
---	-------

TOTTEN AND CROSSFIELD'S PURCHASE.

Township 11.

Town and lot.

Area in acres.

Johnsburgh :

17.	300
18.	300
19.	300
20.	300
21.	300
22.	300
28.	300
29.	300
58.	300
60.	150

Township 12.

60.	166
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*Township 14.*North $\frac{1}{2}$ and South East $\frac{1}{4}$, Pond's Survey.*Residue of Township.*

106.	132
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South West $\frac{1}{4}$, Leggett's Survey.

8.	150
10.	112
14.	150

Township 24.

24.	420
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[Assem. Doc. No. 126.] 41

WASHINGTON COUNTY.

Total number of acres 310.50.

DETAILED STATEMENT.

GRANVILLE, TOWN OF.

Town and lot.	Area in acres
Granville :	
B'd E. by Lansing Day's Est., S. by Highway and W. by A. W. Tupper.....	1

SOUTH BAY TRACT.

Dresden :	
1.	189½
50.	120

ADDENDA.

CLINTON COUNTY.

GORES.

Livingstone Gore.

Saranac :	
22. S. E. cor. 39 a. Ex. S. Ells 3 a. in S. E. cor. 10 a. b'd N. by 10 a. owned by A. Norris E. by lot line, S. by 3 a. owned Eells, and W. by 15 a. of McMurray, and 11 a. b'd N. by Farrell, and E. by Town line, S. by Allen and W. by Mc- Murray.	15

RECAPITULATION.

LIST OF STATE LANDS

ACQUIRED BY TAX SALE OF 1881.

	Acres.
Clinton County	11,402.78
Essex County	24,994.76
Franklin County	9,884.75
Fulton County.. ..	2,737.12
Hamilton County	93,316 91
Herkimer County.	11,434.89
Lewis County.....	3,903.87
Saratoga County	4,687.00
St. Lawrence County	1,248.42
Warren County	11,669.25
Washington County... ..	310.50
Total	<u>175,590.25</u>

APPENDIX D

The following is a list of certain tax lands contained in the foregoing Appendix which, the Comptroller has officially notified me, are no longer State lands:

CLINTON COUNTY.

OLD MILITARY TRACT.

Township No. 4.

Town and lot.	Area in acres.
Saranac :	
15. E. $\frac{2}{3}$ of S. $\frac{1}{2}$	213 $\frac{1}{3}$

Township No. 5.

Ellenburgh :	
2.	196 $\frac{2}{3}$
3.	213 $\frac{1}{3}$
4.	213 $\frac{1}{3}$
5.	213 $\frac{1}{3}$
6.	213 $\frac{1}{3}$
7.	213 $\frac{1}{3}$
8. Ex. N. W. cor.....	113 $\frac{1}{3}$
9. S. end.....	138 $\frac{1}{3}$
10. S. end.....	146 $\frac{1}{3}$
11. S. $\frac{1}{2}$	106 $\frac{2}{3}$
12. S. end 84 a., ex. 20 a., S. W. cor. thereof.....	64
28. S. end	113 $\frac{1}{3}$
29. Ex. 83 a. N. end.....	130 $\frac{1}{3}$
30. S. end N. $\frac{1}{2}$	39 $\frac{2}{3}$
30. S. $\frac{1}{2}$	106 $\frac{2}{3}$
31.	213 $\frac{1}{3}$
32.	213 $\frac{1}{3}$
33.	213 $\frac{1}{3}$
48. N. E. cor. 61 $\frac{1}{3}$, S. E. cor. 61 $\frac{1}{3}$	122 $\frac{2}{3}$
50. N. E. cor.....	98 $\frac{1}{3}$
51.	213 $\frac{1}{3}$
52.	213 $\frac{1}{3}$
53.	213 $\frac{1}{3}$

Township No. 5 — continued.

Town and lot.	Area in acres.
54.	213 $\frac{1}{3}$
55.	213 $\frac{1}{3}$
56. Ex. 50 a. S. W. cor.....	163 $\frac{1}{3}$
57.	213 $\frac{1}{3}$
58.	213 $\frac{1}{3}$
59.	213 $\frac{1}{3}$
60.	213 $\frac{1}{3}$
61.	213 $\frac{1}{3}$
62.	213 $\frac{1}{3}$
63.	213 $\frac{1}{3}$
64.	213 $\frac{1}{3}$
65. Ex. 40 a. N. W. cor.....	169 $\frac{1}{3}$
66. Ex. 100 a. S. end.....	113 $\frac{1}{3}$
68. N. E. cor.....	151
69. N. P't.....	63 $\frac{1}{3}$
69. S. P't of 113 $\frac{1}{3}$ a., N. P't	50
69. All of 63 $\frac{1}{3}$ a., W. P't not contained in 113 $\frac{1}{3}$ a., N. P't of lot.....	29 $\frac{69}{100}$
69. All of 106 a., E. P't of 169 $\frac{1}{3}$ a., W. P't not con- tained in 113 $\frac{1}{3}$ a., N. P't of lot	49 $\frac{7}{10}$
70.	213 $\frac{1}{3}$

Township No. 6.

Clinton:

34. N. W. cor., 94 r. wide N. and S., and 120 r. long E. and W.....	70
--	----

PION PATENT.

Saranac:

4. S. W. cor., b'd E. by Turner.. ..	7
4. N. E. $\frac{1}{4}$ Ex. 27 a. N. E. cor. thereof.....	97
5. B'd N. by Lewis, E. by Turner and S. by lot line	25

DUERVILLE PATENT.

Altona:

42.	250
----------	-----

REFUGEE TRACT.

420 a. Lots.

191. E. $\frac{1}{2}$	210
-----------------------------	-----

ESSEX COUNTY.

OLD MILITARY TRACT.

Township 1 and 2.

Richard's Survey.

Town and lot.

Area in acres.

Keene :

42. W. P't 100

Township No. 10.

220.

293.

354.

Township No. 11.

North Elba :

217. 200

Township No. 12.

Thorn's Survey.

22. S. $\frac{1}{2}$ 8059. S. $\frac{1}{2}$ 80143. W. $\frac{1}{2}$ 80

ROARING BROOK TRACT.

Elizabethtown :

47. 260

WARREN COUNTY.

PALMER'S PURCHASE — REAR DIVISION.

Great Lot, No. 3.

Stony Creek :

N. $\frac{1}{2}$ of 3,150 a. S. P't 1,575

FRANKLIN COUNTY.

Gore E. of Township No. 9, O. M. T.

Bellmont :

9. S. E. cor. 30

MACOMB'S PURCHASE.

Great Tract No. 1.

Township No. 23 (S. E. $\frac{1}{4}$).

Town and lot.	Area in acres.
N. end of 144 a., N. W. cor.....	111
S. end of 144 a., N. W. cor	33

HAMILTON COUNTY.

TOTTEN AND CROSSFIELD'S PURCHASE.

Township No. 37.

Long Lake :

13.	160
33.	200
71.	160
72.	160
73.	160
74.	160
75.	160
76.	160
77.	160
78.	160
79.	160
80.	200
81.	203
82.	200
95.	160
96.	160
97.	160
98.	160
99.	160
101.	160
102.	160
103. ..	160
104.	160
105.	200
106.	203
112.	240
113.	240

BERGEN'S PURCHASE.

PATENT No. 7.

Town and lot.	Area in acres.
Wells :	
1.	270

OXBOW TRACT.

Arietta :	
250.	155

HERKIMER COUNTY.

VROOMAN'S PATENT.

Wilmurt :	
9. All in Wilmurt, Ex. 60 a. W. end thereof.....	74

JERSEYFIELD PATENT.

Ohio :	
41. N. $\frac{1}{2}$, ex. 50 a. S. E. cor. and 50 a. S. W. cor. thereof, resident land of David Hodge.....	425

FULTON COUNTY.

LOTT AND LOW'S PATENT.

Stratford :	
29. S. W. cor.....	40

JERSEYFIELD PATENT.

60. S. E. $\frac{1}{4}$, or S. E. cor.....	250
61. W. P't, S. W. cor., or W. cor.....	100
[Assem. Doc. No. 126.]	42

APPENDIX E.

LAWS RELATING TO THE ADIRONDACK REGION PASSED DURING 1883.

CHAPTER 13.

AN ACT to prohibit sales of lands belonging to the state in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence and Warren.

Passed February 6, 1883.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. Hereafter and from the passage of this act no sales shall be made of lands belonging to the state situated in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence and Warren.

§ 2. Nothing in this act shall be construed as prohibiting the commissioners of the land office from conveying lands heretofore contracted to be sold, and not yet conveyed, to the purchasers thereof.

CHAPTER 331.

AN ACT to protect the waters of Lake George and Schroon lake in this state.

Passed April 27, 1883 ; three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. It shall not be lawful for any person or persons to drain, deposit, throw or cast any dead animal, carrion, offal, excrement, garbage or other putrid or offensive matter in the waters of Lake George and Schroon lake in this state ; provided that nothing herein shall be construed to apply to the usual waste or drainage from factories.

§ 2. Whoever shall violate any of the provisions of this act shall forfeit the sum of one hundred dollars for each offense.

§ 3. Any person may in his own name, or in the name of himself and the overseers of the poor of the town in which the offense is committed, prosecute and recover the penalty prescribed in the next preceding section for himself and the said overseers of the poor of said town, and, on a recovery, shall be entitled to retain one-half of said penalty, and the other half, after deducting one-half the expenses of the prosecution shall be paid to the overseers of the poor of said town for the support of the poor thereof.

§ 4. This act shall take effect immediately.

CHAPTER 470.

AN ACT in relation to state lands.

Passed May 25, 1883; three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. Whenever the state of New York owns an undivided interest with any person in any real estate within this state, or holds and is in possession of any such real property, as joint tenant or tenant in common with any person within this state who has an estate of freehold therein, any such person may, upon obtaining the consent in writing of the comptroller thereto, maintain an action for the partition of said property according to the respective rights of the parties interested therein, and for a sale thereof if it appears that a partition cannot be made without great prejudice to the owners, in the same manner as if the state were not entitled to exemption from legal proceedings and with the same force and effect as in other cases, except no costs shall follow judgment thereon. A copy of the summons and complaint in such action shall be served upon the comptroller of the state and it shall be his duty to deliver the same to the attorney-general for proper appearance for the state.

§ 2. In case any forest lands situated in the counties of Hamilton, Herkimer, St. Lawrence, Franklin, Essex, Clinton, Saratoga, Fulton or Lewis, in which the state is a joint owner or tenant in common with any person or persons, is sold in pursuance of a judgment of the court, as provided in section one of this act, the comptroller shall in behalf of the state attend the sale of said lands and purchase the same for the state, if said lands can, in the judgment of the comptroller, be purchased at their fair value.

§ 3. For the purpose of paying for lands purchased upon partition sales, as provided in section three of this act, the sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any funds of the state not otherwise appropriated, such sums to be paid by the treasurer of the state upon the warrants of the comptroller. In case the funds hereinbefore appropriated shall at the date of entry of a judgment of partition, as herein provided, be exhausted, the court shall, upon application of the attorney-general, direct that no sale be made until the expiration of two months after adjournment of the next session thereafter of the legislature.

§ 4. The commissioners of the land office may, in their discretion, sell any lands which have been any part of the canal lands of this state and which have been or may be determined and officially declared by the canal board to be abandoned by the state for canal purposes, and also any lands to which the state has acquired title by purchase, on the foreclosure of mortgages taken by any loan commissioner on the loan of certain United States deposit funds, or any loan of money authorized by this state, and also any lands lying within the corporate limits of any city or village and which has not

been devoted by statute to some public use. The commissioners of the land office shall have no power to lease any forest lands lying within the counties of St. Lawrence, Franklin, Lewis, Hamilton, Herkimer, Essex, Fulton, Saratoga and Warren.

§ 5. The commissioners of the land office are hereby authorized to sell and convey at private contract and sale all the right, title and interest of the people of the state of New York to any lands in the county of Clinton, on such terms as shall be for the best interest of the state; provided, however, that any such sale or sales shall be confined to lands from which the timber has been removed, and to actual settlers, and in tracts of not over two hundred acres in one parcel; and provided further such sales shall be confined to lands purchased for prison purposes. If any part of the price is unpaid at the time the grant is executed the payment of it with interest at the rate of six per cent per annum shall be secured by mortgage upon the land sold, and upon default of payment thereof of principal or interest, then the said commissioners are hereby authorized to foreclose said mortgage by sale of said land. No sale under the provisions of this act shall be made, except upon the recommendation of the comptroller of this state.

CHAPTER 499.

AN ACT to provide for the survey of detached portions of state lands, in the north-eastern portion of New York and Adirondack wilderness, and making appropriation therefor.

Passed June 2, 1883; three-fifths being present.

The People of the State of New York, represented in Senate and Assembly do enact as follows :

SECTION 1. The superintendent of the Adirondack survey is hereby directed to make surveys showing the location and area of the detached portions of state lands in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence and Warren, and to connect the same with the surveys of the interior, and to show upon a map or maps the position of such lands.

§ 2. The methods of surveys shall be in accordance with those now in use on the Adirondack survey, and copies of all maps relating to such state lands shall be filed in the office of the comptroller and state engineer and surveyor, and the said superintendent shall render a report to the legislature of his proceedings and of the results of the work within sixty days after the meeting of the legislature, and the sum of fifteen thousand dollars is hereby appropriated, payable by the state treasurer, on the warrant of the comptroller, out of any moneys not otherwise appropriated, for the purposes of carrying out the provisions of this act; which said sum shall be accounted for to the comptroller, with bills of items and vouchers therefor.

§ 3. This act shall take effect immediately.

APPENDIX F.
DECLINATION OF THE MAGNETIC NEEDLE
BASED UPON
FIELD OBSERVATIONS AT MERIDIAN LINE STATIONS OF THIS SURVEY.

Computed declinations of the needle based on observed azimuths of ancient boundary lines from the true meridian as determined during 1884 and compared with recorded original magnetic bearings of said lines in the years (1766, etc.) given.

NOTE.—The magnetic observations were generally taken upon the subdivision or patent lines and not at the trigonometrical stations. The latitudes and longitudes of the magnetic stations are, therefore, deduced positions of stations in the vicinity.

STATION.	L. and M. of Station.		Time of Observation.				Declination of needle observed. (Variation West.)	Remarks.
	• L.	M.	Year.	Month.	Day.	Hour.		
Morehouseville, Hamilton County	° 43	' 20.1	H. M. 4 59.0	1883	Aug.	5th.	5 P.M.	Observations by Mr Colvin.
Piseco Lake P. O., near Courtney's... ..	43	24.0	4 58.2	1883	Aug.	6th.	5.30 "	Hamilton county.
Upper Saranac Lake.....	44	18.7	4 57.0	1883	Aug.	15th.	10.30A.M.	Franklin county.
St. Regis Lake, near Paul Smith's.	44	24.0	4 56.9	1883	Aug.	16th.	9.30 "	Franklin county.
Malone, Low's Pinnacle	44	49.5	4 57.0	1883	Aug.	17th.	3.30 P.M.	Franklin county.
Moosehead mountain, near Seavey's	44	14.0	4 58.5	1883	Aug.	22d.	5.41 "	Franklin county.
Bog mountain, near Fenton's	44	23.0	4 58.9	1883	Aug.	23d.	4 "	Franklin county.
Foot of Bog. Munger's at Raquette R. Station 165...	44	25.0	4 59.0	1883	Aug.	23d.	5.45 "	Franklin county.
Colton Village Raquette R. S., Farnsworth m't. 44....	44	31.7	4 59.6	1883	Aug.	24th.	8.30A.M	Franklin county.

St. Regis, Indian Village...	44	59.0	4	58.6	1883	Sept.	10th.	4 P. M.	10	31.2	Franklin county.
Mt. Azure..	44	27.5	4	57.9	1883	Sept.	16th.	4.58 "	9	40.0	Franklin county.
Ragged Lake	44	42.0	4	56.0	1883	Sept.	22d.	10.38A.M.	14	59.2	Franklin county.
Johnsburch	43	36.0	4	55.8	1883	Aug.	4th.	11 "	10	45.6	Warren county.
Near outlet of Schroon Lake, Chester....	43	41.0	4	55.2	1883	Aug.	5th.	10 "	9	46.2	Warren county.
Near Warrensburgh	43	30.0	4	54.9	1883	Aug.	8th.	5 P. M.	11	01.2	Warren county.
Starbuckville.....	43	38.5	4	55.0	1883	Aug.	8th.	2 "	10	37.5	Warren county.
Horicon.....	43	36.5	4	55.0	1883	Aug.	8th.	1 "	10	38.7	Warren county.
North Creek....	43	49.5	4	55.9	1883	Aug.	4th.	2.30 "	11	38.75	Warren county.
Riverside	43	37.5	4	55.5	1883	Aug.	4th.	8 A. M.	9	49.37	Warren county.
At the Glen....	43	33.0	4	55.4	1883	Aug.	3d.	3.30P.M.	13	10.00	Warren county.
Station south of Thurman.....	43	24.5	4	55.3	1883	Aug.	3d.	9 A. M.	11	26.87	Warren county.
Stoney Creek Station, Adirondack R. R.....	43	22.75	4	55.4	1883	Aug.	1st.	5 P. M.	11	10.62	Warren county.
Luzerne.....	43	16.75	4	55.3	1883	Aug.	1st.	10 A. M.	10	55.00	Warren county.
Thurman Depot.....	43	27.0	4	55.2	1883	Aug.	3d.	10.30 "	11	20.62	Warren county.
Clear Pond, North Elba	44	10.0	4	55.8	1883	Sept.	26th.	.....	9	50.0	Essex county.
Jerseyfield Lake	43	16.0	4	58.9	1883	July.	8th.	6 P. M.	8	20.0	Herkimer and Hamilton Co.
Jerseyfield Lake.....	43	16.0	4	58.9	1883	July.	8th.	6 "	8	10.0	Herkimer county.
Mt. Jerseyfield	43	15.8	4	58.9	1883	July.	9th.	4.30 P.M.	8	57.3	Herkimer county.
Station on West Shore of Jerseyfield Lake...	43	16.1	4	59.0	1883	July.	10th.	10 A. M.	9	12.0	Herkimer and Hamilton Co.
Station on East Shore of Jerseyfield Lake.....	43	16.1	4	58.9	1883	July.	10th.	4 P. M.	9	02.0	Herkimer and Hamilton Co.
Long Point on Jerseyfield Lake.....	43	16.0	4	58.9	1883	July.	10th.	6.30 "	12	36.5	Hamilton county.
Myers' Hill, near Forestport.....	43	25.6	4	00.3	1883	July.	16th.	6 P. M.	7	00.5	Oneida county.
Gommer Hill ..	43	36.7	5	01.7	1883	July.	17th.	3.30 "	8	55.2	Lewis county.
Myers' Hill.....	43	25.6	5	00.3	1883	July.	19th.	6 "	8	09.6	Oneida county.

APPENDIX F. — (Concluded.)

STATION.	L. and M. of Station.			Time of Observation.				Declination of needle observed. (Variation West.)	Remarks.
	L.	M.		Year.	Month.	Day.	Hour.		
		°	'						
Northeast corner of Servis' Patent.....	43	16.2	H. M. 5 00.3	1883	July.	20th.	3 30 P.M.	9 27.5	Observations by Mr. Colvin.
High Dune, Shore West Canada creek.....	43	15.15	5 00.3	1883	July.	21st	10 A. M.	9 26.7	Herkimer county.
North bank of West Canada creek opposite Baxter's	43	17.0	5 00.3	1883	July	22d.	3.30 P.M.	9 43.7	Herkimer county.
Hill Station, Service's Patent.....	43	16.2	5 00.3	1883	Aug.	3d.	5.30 "	10 33.0	Oneida county.
Declinations deduced from observations of bearings of ancient lines.									
West of Jerseyfield Lake	43	15.5	4 58.9	1768	July.	.....	.....	6 14.9	Hamilton and Herkimer Co's.
Crossing of Jerseyfield Lake.....	43	16.0	4 58.9	1768	July.	.....	.....	5 56.7	Herkimer county.
Station Westward on north line of Service's Patent.	43	16.3	5 00.4	1795	.....	.....	.....	4 40.0	Oneida county.
Northeast corner Service's Patent.....	43	16.2	5 00.3	1795	.....	.....	.....	4 19.5	Oneida county.
East line of Oneida county....	43	16.2	5 00.3	1802	.....	.....	.....	5 00.1	Oneida and Herkimer counties.
West Canada Lakes	43	36.0	4 58.4	1772	.....	.....	.....	6 54.2	Hamilton county.
Keene Valley.....	44	10.0	4 55.1	1817	.....	.....	.....	8 02.6	Essex county.
Keene Valley.	44	10.0	4 55.1	1883	.....	.....	.....	11 32.6	Essex county.
Malone.....	44	49.5	4 57.0	1799	.....	.....	.....	9 15.0	Franklin county.
St. Regis, Indian Reservation.....	44	59.45	4 58.6	1799	.....	.....	.....	7 16.0	Franklin county.
St. Regis Lakes.....	44	24.0	4 56.9	1799	.....	.....	.....	6 54.0	Franklin county.
Saranac Lakes.....	44	18.7	4 57.0	1799	.....	.....	.....	7 32.0	Franklin county.
Granshue Township ..	44	23.0	4 58.9	1880	..	.....	.....	1 16.2	Franklin county.

TABLE OF THE VARIATION OF THE NEEDLE.

For use in the Land Office at Pierrepont Manor in Jefferson County, New York, in LAT. $43^{\circ} 43' 45''$ N., and LONG. $75^{\circ} 56' 57''$ W.; and to apply to Great Tracts Nos. 4, 5 and 6 Macomb's Purchase, which were surveyed and allotted from 1795 to 1803.

Made 1823, September 18, and 1856, November 25:

By William C. Pierrepont.

Variation: Yearly, $5' 14''$. 4367: Daily, $0''$. 86107.*

			°	'	''				°	'	''
1797.	October 1, no variation.					1840.	November 25, var. W....		3	46	09.10
1797.	November 25, var. W....	0	00	48.24		1841.	do do	3	51	23.54	
1801.	do do	0	21	45.99		1842.	do do	3	56	37.98	
1802.	do do	0	27	00.43		1843.	do do	4	01	52.42	
1803.	do do	0	32	14.87		1844.	do do	4	07	06.86	
1804.	do do	0	37	29.30		1845.	do do	4	12	21.30	
1805.	do do	0	42	43.76		1846.	do do	4	17	35.74	
1806.	do do	0	47	58.17		1847.	do do	4	22	50.18	
1811.	do do ...	1	14	10.35		1848.	do do	4	28	04.62	
1816.	do do	1	40	22.54		1849.	do do	4	33	19.06	
1820.	do do	2	01	20.30		1850.	do do	4	38	33.50	
1821.	do do	2	06	34.74		1851.	do do	4	43	47.94	
1822.	do do	2	11	49.19		1852.	do do ...	4	49	02.38	
1823.	do do	2	17	03.62		1853.	do do	4	54	16.82	
1824.	do do	2	22	18.06		1854.	do do	4	59	31.26	
1825.	do do	2	27	32.05		1855.	do do	5	04	45.70	
1826.	do do	2	32	46.94		1856.	do do	5	10	00.14	
1827.	do do	2	28	01.38		1857.	do do ...	5	15	14.58	
1828.	do do	2	43	15.82		1858.	do do	5	20	29.02	
1829.	do do ...	2	48	30.26		1859.	do do	5	25	43.46	
1830.	do do	2	53	44.70		1860.	do do	5	30	57.90	
1831.	do do ...	2	58	59.14		1861.	do do ...	5	36	12.34	
1832.	do do	3	04	13.58		1862.	do do	5	41	26.78	
1833.	do do ...	3	09	28.02		1863.	do do ...	5	47	41.22	
1834.	do do	3	14	42.46		1864.	do do	5	52	55.65	
1835.	do do	3	19	56.90		1865.	do do ...	5	58	10.10	
1836.	do do ...	3	25	11.34		1866.	do do	6	03	24.54	
1837.	do do	3	30	25.78		1874.	do do ..	6	44	00.00	
1838.	do do	3	35	40.22							
1839.	do do ...	3	40	54.66							

NOTE.—The only actual observations preserved are 1823, September 18.. $2^{\circ} 16' 05''$

1847, 18.. 4 23

1856, November 25.. 5 10

1860, July 15.. 5 36

1863, 15.. 5 44

1864, April 12.. 5 50

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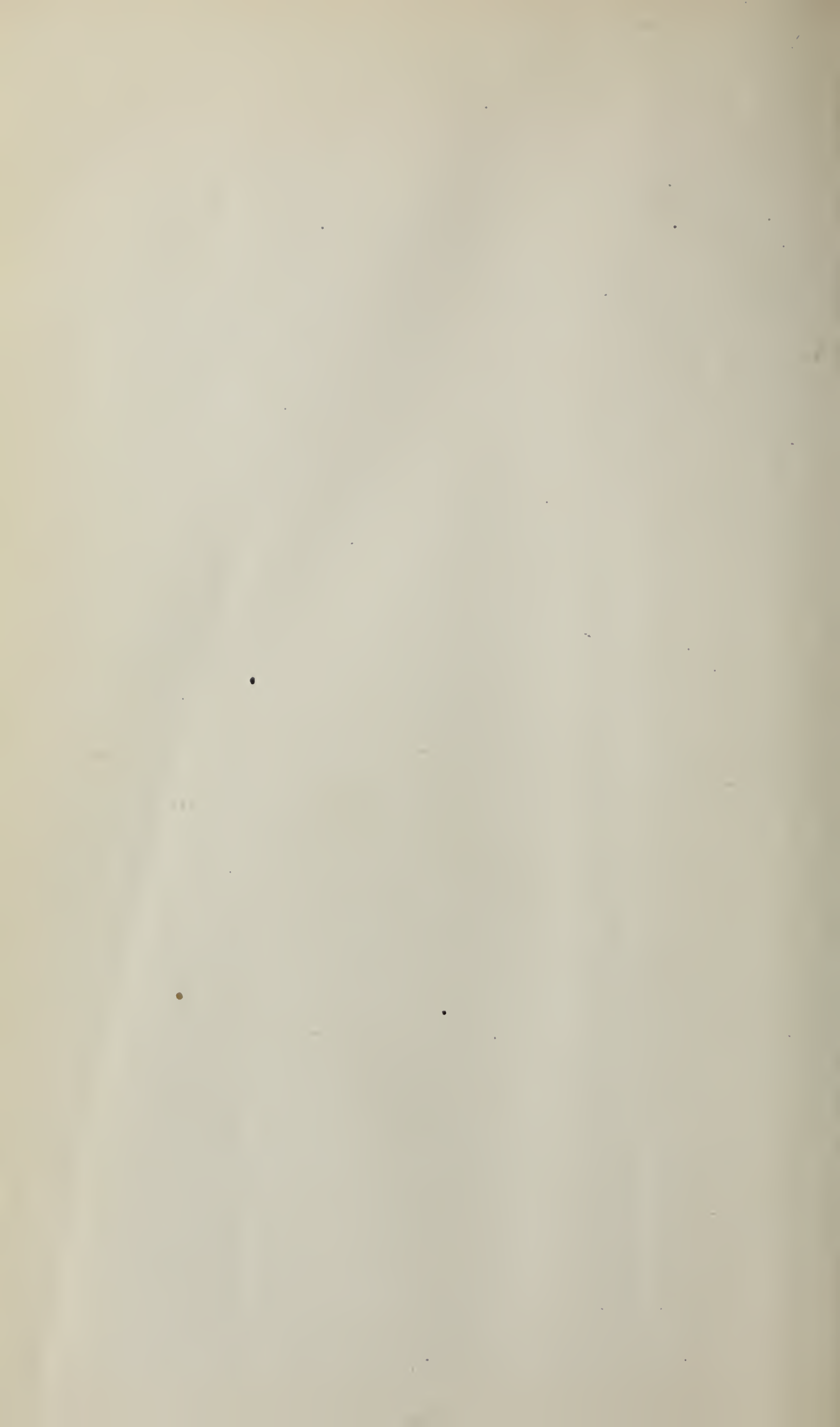
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Printed No. 385, G. O. 380. Introduced by Mr. Van Cott :

An act relating to the further supply of water for fire, sanitary and other purposes in the city of New York.

Printed No. 275, G. O. 272. Introduced by Mr. Van Cott:

An act to amend an act entitled "An act to consolidate into one act, and to declare the special and local laws affecting public interests in the city of New York," passed July 1, 1882.

Printed No. 199, G. O. 196. Introduced by Mr. Van Cott:

An act relative to certificates of sales by sheriffs of real property.

STATE OF NEW YORK.

No. 128.

IN ASSEMBLY,

MARCH 17, 1884.

COMMUNICATION

FROM THE BROOKLYN PARK COMMISSIONERS.

To the Legislature of the State of New York :

In reply to the resolution of your honorable body, of date of March 6, 1884, the Brooklyn Park Commissioners beg leave to submit the following for your information :

The areas referred to are designated by law as public places, and comprise land forming the western terminus (lying between the streets known as Columbia Heights and Furman street), of the following named streets, to-wit: Clark street, Orange street, Pineapple street, Cranberry street and Middagh street.

The dimensions of each area are the same, namely, 150 feet in length, between the westerly line of Columbia Heights and the easterly line of Furman street, and fifty feet in width.

The surfaces are below the grade of Columbia Heights and slope sharply toward Furman street, being intersected and sustained, on the line of the latter street, by a high retaining wall. The difference in elevation of Columbia Heights and Furman street is about sixty feet.

Under authority conferred by the act of the Legislature (chap. 644), passed 1866, these areas were improved by a commission of citizens who have retained control and maintained the same to this date. This improvement, carried out by said commission, comprehended the work of filling and grading. The surfaces were properly turfed, planted with shrubs and flowers, and otherwise adorned; the grounds were suitably inclosed, and thereafter, throughout the fine seasons of the year, were cared for in a satisfactory manner. A notable feature in the purposes of this improvement is specially designated in the law itself, namely: That an unobstructed view shall be maintained through and over the ground, and that there shall be no interposition to the free passage of air. The commissioners appointed under the act appear to have discharged their duties in an intelligent manner and to have carried out the spirit and intent of the law. In the judg-

ment of the Brooklyn park commissioners, these areas, by reason of their restricted limits and the peculiarity of the location, do not afford opportunity for any considerable outlay of money for any improvement or care varying essentially in character from that already applied to them. They are too small for the carrying out of any but the simplest elements of design in landscape architecture, nor does it seem practicable or desirable to open them as public resorts.

Located as they are at regular intervals on the line of one of the most desirable streets of this city, they afford at present a sufficient reason to be, and while adding to the value and attractiveness of a good neighborhood, contribute at the same time a common pleasure to the citizens at large, to whom a well-kept turf, beautified by flowers, etc., and a passing glimpse of the waters of New York bay, form an agreeable incident in his passage through the street. In view of these facts the Brooklyn park commissioners are constrained to recommend that the aforesaid public places shall continue to be maintained in a manner and for the purposes as at present and as originally designed by the law. The determination of the cost of any serious remodeling of these inclosures must, in the nature of the case, depend upon the use to which it is proposed to put them, if such use is to differ from that to which they are now appropriated.

For other purposes it may be desirable to regrade them in part, returfing will be necessary, and a more considerable and systematic planting with shrubbery and flowers in season could be provided for; gates, steps, open shelters and seats may be arranged for, and the attendance of workmen, police, etc., will be necessary to be provided, for their proper care and orderly use, in case they should be thrown open.

With only the meager and somewhat indefinite inquiry of your honorable body before us we would report that a sum varying from \$3,000 to \$10,000 in the aggregate may be spent upon the public places covered by your inquiry of the 6th inst.

Dated BROOKLYN, *March 15*, 1884.

Respectfully submitted,

Brooklyn Park Commissioners.

WILLIAM B. KENDALL,

President.

STATE OF NEW YORK.

No. 129.

IN ASSEMBLY,

MARCH 19, 1884.

LIST OF SPECIAL ORDERS.

Wednesday March 26, 1884, and continue from day to day until disposed of.

Nine bills reported from special committee appointed to investigate the local government of the city and county of New York.

(Assem. Doc. No. 129.) 1

STATE OF NEW YORK.

No. 130.

IN ASSEMBLY.

MARCH 20, 1884.

REPORT OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton submitted the report from the sub-committee of the whole, which was laid on the table and ordered printed.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 409, G. O. 402, entitled "An act to repeal chapter 227 of the Laws of 1875, entitled 'An act creating the office of inspector of public works,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 374, G. O. 369, entitled "An act for the preservation of fish in the Hudson river," reported in favor of the passage of the same with amendments, as follows:

Section 1, add at the end of line three the word "adjacent."

Also, strike out all of section 1 after the word "misdemeanor," in line 5.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 350, G. O. 343, entitled "An act to authorize the State Board of Claims to hear, audit and determine the claim of Edward W. Johnson against the State," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 362, G. O. 357, entitled "An act to authorize the town of Westchester to borrow money to improve therein highways," reported in favor of the passage of the same with an amendment by striking out in line 4 of section 1 the words in brackets, "and to such other matters of general benefit of said town."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 367, G. O. 362, entitled "An act to improve the condition and operations of the sinking fund of the city of New York," reported in favor of the passage of the same with amendments, as follows :

Section 2, after the word "seventy-eight," insert "entitled 'An act relating to certain indebtedness of the city of New York, and to provide for the payment and cancellation of the same.'"

Also amended the title so that it will read, "An act to repeal section 8 of chapter 383 of the Laws of 1878, entitled 'An act relating to certain indebtedness of the city of New York, and to provide for the payment and cancellation of the same, and to improve the condition and operation of the sinking fund of the city of New York.'"

Said bill was ordered reported by the following vote:

For the Affirmative.

Kittle	Childs	Pierson
Nason	Geddes	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 190, G. O. 187, entitled "An act to amend chapter 410 of the Laws of 1882," reported in favor of the passage of the same with an amendment to the title by adding at the end thereof the words "entitled 'An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York.'"

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 399, G. O. 393, entitled "An act to amend chapter 335 of the Laws of 1879, entitled 'An act to amend chapter 252 of the Laws of 1871, entitled 'An act to amend the charter of the village of Geddes, in the county of Onondaga,'" reported in favor of the passage of the same with an amendment by striking out in lines 16 and 17 of section 1, the words in brackets "twenty-five hundred dollars."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Pierson
Nason	Geddes	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 327, G. O. 328, entitled "An act to amend chapter 269 of the Laws of 1879, entitled 'An act making an appropriation to pay the expenses of the collection of tolls, superintendence, ordinary repairs and maintenance of the canals for the fiscal year commencing on the 1st day of October, 1879, and to provide for a contingent deficiency in the revenues for the calendar year 1879, and making further appropriations out of any unexpended moneys in the treasury to the credit of the fund for extraordinary repairs,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Childs	Pierson
Nason	Geddes	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 358, G. O. 353, entitled "An act to legalize, ratify and confirm a resolution of the board of supervisors of the county of Kings, adopted August 7, 1877, in relation to the compensation of certain county officers," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Pierson
Nason	Geddes	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 387, G. O. 382, entitled "An act to further amend chapter 596 of the Laws of 1874, entitled 'An act to incorporate the Manhattan Mortgage Company,' and to change the name of the said company and increase the number of its directors," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 10.
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 357, G. O. 32, entitled “An act to amend section 1 of chapter 40 of the Laws of 1848, entitled ‘An act to authorize the formation of corporations for manufacturing, mining, chemical, agricultural, horticultural, medical or curative, mercantile or commercial purposes,’ as subsequently modified and amended,” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Nason	Geddes	Pierson
Earl	Haskell	Price
Childs	Priddy	Clinton — 9.

For the Negative.

Dayton — 1.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 388, G. O. 383, entitled “An act supplementary to chapter 836 of the Laws of 1872, entitled ‘An act to regulate places of public amusement in the city of New York,’” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Haskell	Pierson
Earl	Ely	Price
Childs	Priddy	Clinton — 10.
Geddes		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 329, G. O. 330, entitled “An act in relation to the stenographers of the courts of the city of New York,” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Nason	Haskell	Pierson
Earl	Ely	Price
Childs	Priddy	Clinton — 10.
Geddes		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 395, G. O. 390, entitled "An act to enable the North Afton Rural Cemetery Association of Afton, Chenango county, to acquire control of the old burying ground in North Afton," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Ely	Clinton — 11.
Childs	Priddy	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 221, G. O. 216, entitled "An act to regulate and fix the toll at the bridge of the Middleburgh Bridge Company, at the village of Middleburgh, in Schoharie county," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Ely	Clinton — 11.
Childs	Priddy	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 275, G. O. 272, entitled "An act to amend an act entitled 'An act to consolidate into one act, and to declare the special and local laws affecting public interests in the city of New York,'" passed July 1, 1882, reported in favor of the passage of the same with an amendment to the title by striking out the first words "An act" in line one, and inserting "chapter 410 of the Laws of 1882."

Said bill was ordered reported by the following vote :

For the Affirmative.

Nason	Haskell	Pierson
Earl	Ely	Price
Childs	Priddy	Clinton — 10.
Geddes		

For the Negative.

Dayton — 1

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 371, G. O. 366, entitled "An act to amend chapter 534 of the Laws of 1879, entitled 'An act for the preservation of moose, wild deer, birds, fish and other game,'" and the acts

amendatory thereof and supplementary thereto, reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Ely	Clinton — 11.
Childs	Priddy	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 375, G. O. 370, entitled “An act to amend section 26 of chapter 721 of the Laws of 1871, entitled ‘An act to amend and consolidate the several acts relating to the preservation of moose, wild deer, birds and fish,’ passed April 26, 1871,” reported in favor of the passage of the same with amendments, as follows :

Section 1, line 2, after the word “seventy-one” insert “entitled ‘An act to amend and consolidate the several acts relating to the preservation of moose, wild deer, birds and fish;’” also, with the title amended by striking out the words “passed April 26, 1871.”

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Ely	Clinton — 11.
Childs	Priddy	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 283, G. O. 280, entitled “An act in relation to the opening, extending or widening streets and avenues in the village of Edgewater through the lands of the people of the State of New York in said village,” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Ely	Price
Earl	Priddy	Clinton — 10.
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 319, G. O. 312, entitled “An act to amend chapter 467 of the Laws of 1879, entitled ‘An act to amend chapter 459 of the Laws of 1877, entitled ‘An act in relation to the salaries, fees, percentages and allowances of the officers of the city of Brooklyn,’” reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Ely	Price
Earl	Priddy	Clinton — 10
Childs		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 55, G. O. 422, entitled "An act authorizing the city of Brooklyn to convey certain lands defective in title," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Haskell	Price
Earl	Priddy	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 195, G. O. 470, entitled "An act to amend chapter 128, Laws of 1876, passed April 14, 1876, entitled 'An act to amend chapter 46 of the Laws of 1872, entitled 'An act to amend an act entitled An act to amend and consolidate the charter of the village of Middletown, passed March 31, 1866,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Geddes	Pierson
Nason	Ely	Price
Earl	Priddy	Clinton — 10.
Childs		

STATE OF NEW YORK.

No. 131.

IN ASSEMBLY,

MARCH 20, 1884.

LIST OF GENERAL ORDERS.

G. O.

498. Introduced by Mr. Briggs :

An act to authorize the Superintendent of Public Works to construct a dam across the outlet of Indian lake for the purpose of storing and preserving water.

499. Introduced by Mr. Heath :

An act making appropriation for the purchase of a service uniform for organizations of the national guard of the State of New York.

500. Introduced by Mr. Oliver :

An act to amend an act entitled "An act concerning pawn-brokers."

501. Introduced by Mr. C. W. Brown :

An act to prevent the spread of foul brood among bees and to extirpate the same.

502. Introduced by Mr. Forsyth :

An act for the relief of the Cohoes Company by enabling it to appropriate and use the funds and therewith acquire lands, rights and easements, and construct and maintain a dam across the Mohawk river, and a reservoir thereby created above the aqueduct at Crescent, and channels therefrom and wholly or partly upon lands belonging to the people of the State of New York, for the purpose of securing a better supply of water for the use of said Cohoes Company, and so far as may be necessary for such purposes, to extend the operation of said Cohoes Company into the town of Halfmoon and Clifton park, Saratoga county.

503. (Senate.) Introduced by Mr. Coggeshall :

An act in relation to the publication of legal and other notices and advertisements, and in relation to the State paper.

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G. O.

504. Introduced by Mr. Hooley :

An act to authorize the city of Troy to borrow money and to provide for the payment of the same.

505. Introduced by Mr. Miles :

An act to provide for the erection of certain public buildings in the city of Troy and to authorize said city to borrow money for the payment of expenses incurred in the erection of such buildings

506. Introduced by Mr. Hendricks :

An act to provide for the support of the fire department and to regulate the salaries of certain officers of the city of Syracuse and revise the charter of said city.

507. Introduced by Mr. Nason :

An act entitled "An act to enable the city of Brooklyn to pay the arrearage of county taxes."

508. Introduced by Mr. Hendricks :

An act to revise, amend and consolidate the several acts in relation to the city of Syracuse and to revise and amend the charter of said city.

509. Introduced by Mr. Earl :

An act to authorize the town board of the town of Flatbush, in the county of Kings, to license and regulate all public hacks, vehicles, venders and peddlers in said town.

510. Introduced by Mr. Van Allen :

An act to repeal an act entitled "An act to confer further power on the boards of supervisors," passed May 22, 1882.

511. Introduced by Mr. Sweet :

An act to amend chapter 38 of the Laws of 1872, entitled "An act providing for appeals from the decisions of county superintendents of the poor."

512. Introduced by Mr. Tremper :

An act to enable the voters of the several towns of the State to create and elect boards of town auditors in such towns and to prescribe their powers and duties.

513. Introduced by Mr. Priddy :

An act to amend chapter 170 of the Laws of 1866, entitled "An act to incorporate the village of Montezuma."

514. Introduced by Mr. Haskell :

An act defining the powers and duties of the trustees and officers of the village of Madison and the corporate powers of said village.

515. Introduced by Mr. Sweet :

An act to amend chapter 639 of the Laws of 1868, entitled "An act to amend the act incorporating the village of Phoenix, in the county of Oswego, and the several acts amendatory thereof."

G. O.

516. Introduced by Mr. Rice :

An act to amend section 3 of article 1, title 1, chapter 16 of part 1 of the Revised Statutes.

517. Introduced by Mr. Darragh :

An act to amend chapter 441 of the Laws of 1864, and to repeal chapter 451 of the Laws of 1880, entitled " An act supplementary to chapter 441 of the Laws of 1864, entitled ' An act in relation to the performance of highway labor in Queens county.' "

518. Introduced by Mr. C. W. Brown :

An act to exempt the county of Chenango from the provisions and operation of chapter 346 of the Laws of 1883, entitled " An act to provide for the construction, care, maintenance, preservation and repair of public bridges over streams or other waters forming the boundary lines of counties, and to apportion the expense thereof. "

519. Introduced by Mr. Roosevelt :

An act to amend chapter 299 of the Laws of 1883, entitled " An act to provide for the enrollment of the militia, for the organization and government of the national guard of the State of New York, and for the public defense, and entitled the Military Code. "

520. Introduced by Mr. Husted :

An act to incorporate " The Young Women's Christian Association " of Poughkeepsie.

521. Introduced by Mr. Husted :

An act to authorize the Commissioners of the Land Office to lease land in Hamilton county to Frank H. Stott.

522. Introduced by Mr. Wilcox :

An act to amend subdivision 4, section 9, title 2, article 2, chapter 13, part 1 of the Revised Statutes.

523. Introduced by Mr. Nash :

An act to provide for the adjustment and payment for services and disbursements made and rendered for the Seneca Nation of Indians by Benjamin F. Congdon while attorney for said nation.

524. Introduced by Mr. Husted :

An act to amend chapter 367 of the Laws of 1882, entitled " An act to restrict the formation of corporations under chapter 319 of the Laws of 1848, entitled ' An act to provide for the incorporation of benevolent, charitable, scientific and missionary societies' " and the acts amendatory thereof, and to legalize the incorporation of certain societies. "

525. Introduced by Mr. Farnum :

An act to legalize the official acts of William J. Filkins and others as trustees of the Rural Union Cemetery Association of Joy, Wayne county.

G. O.

526. Introduced by Mr. Van Cott :

An act to enforce the obligations of contracts.

527. Introduced by Mr. W. E. Smith :

An act to amend chapter 547 of the Laws of 1855, entitled "An act allowing illegitimate children to inherit real and personal property in certain cases."

528. Introduced by Mr. Howe :

An act to provide for the appointment of commissioners to prepare and report to the Legislature a bill to facilitate and lessen the expense of the transfer of land and dealing therewith in certain cities of this State.

529. Introduced by Mr. S. W. Johnson :

An act to authorize the town of Winchester, in the county of Westchester, to raise money to pay a judgment against the commissioners of the Eastern boulevard.

530. Introduced by Mr. Allen :

An act to amend an act entitled "An act to permit the town of Lowville to subscribe for stock in a railroad company, and to raise money to pay such subscription," passed April 6, 1866.

531. Introduced by Mr. Van Duzer :

An act to extend the authority of the treasurer of Chemung county in the investment of moneys known as the railroad bonds sinking funds.

532. Introduced by Mr. Harpending :

An act to abolish the office of railroad commissioners in the town of Potter, Yates county.

STATE OF NEW YORK.

No. 132.

IN ASSEMBLY,

MARCH 21, 1884.

LIST OF SPECIAL GENERAL ORDERS.

The Speaker and Clerk, with the consent of the House, refer the following bills to the Sub-Committee of the Whole :

Printed No. 308, G. O. 279. Introduced by Mr. Moore:

An act in relation to grants of land under water.

Printed No. 390, G. O. 385. Introduced by Mr. Nason:

An act to amend an act entitled "An act to extend Flushing avenue, and to lay out and improve Flushing avenue and Newtown turnpike road from Broadway to the city line, and to extend other adjoining streets in the city of Brooklyn," passed May 7, 1868.

Printed No. 449, G. O. 414. Introduced by Mr. Van Allen :

An act to authorize the board of fire commissioners of the city of New York to inquire into and determine the claim of George Nunn to be place upon the pension-roll of the fire department of said city.

Printed No. 450, G. O. 415. Introduced by Mr. Clinton :

An act to provide for a revision of the charter and ordinances of the city of Buffalo.

Printed No. 455, G. O. 177. Introduced by Mr. Ackroyd :

An act to amend an act entitled "An act to amend the act entitled 'An act to revise, amend and consolidate the several acts relating to the village of Whitesboro,' passed February 12, 1859," and several amendments thereto.

Printed No. 195, G. O. 189. Introduced by Mr. Lindsay :

An act to amend chapter 566 of the Laws of 1869, entitled "An act to reorganize the fire department of the city of Brooklyn."

Printed No. 389, G. O. 384. Introduced by Mr. Sipp:

An act to prevent the supervisors of the county of Erie conveying lands in public streets.

Printed No. 241, G. O. 240. Introduced by Mr. Boynton :

An act to extend the jurisdiction of notaries public.

Printed No. 159, G. O. 464. Introduced by Mr. Titus (Senate) :

An act to amend section 15 of title 9 of chapter 519 of the Laws of 1870.

Printed No. 70, G. O. 300. Introduced by Mr. Daggett (Senate) :

An act to amend chapter 193 of the Laws of 1882, entitled "An act relating to the People's Ferry Company," passed May 20, 1882, and to limit and determine the powers thereby vested in and conferred upon the People's Ferry Company.

Printed No. 97, G. O. 294. Introduced by Mr. Gibbs (Senate) :

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York."

Printed No. 301, G. O. 292. Introduced by Mr. Hodges :

An act to authorize the raising and expenditure of money for improving the condition of streets and avenues in the city of Brooklyn.

Printed No. 400, G. O. 394. Introduced by Mr. House :

An act to legalize certain bonds issued by the supervisor of the town of Southfield, in the county of Richmond, and to make provision for the payment of the same.

Printed No. 401, G. O. 395. Introduced by Mr. House :

An act to legalize certain bonds issued by the supervisor of the town of Middletown, in the county of Richmond, and to make provision for the payment of the same.

Printed No. 27, G. O. 195. Introduced by Mr. Thacher (Senate) :

An act to amend chapter 511 of the Laws of 1881, entitled "An act in relation to certain public parks in the city of Albany."

Printed No. 57, G. O. 133. Introduced by Mr. Plunkitt (Senate) :

An act to authorize and empower the commissioners of the sinking fund in the city of New York to appropriate and set apart land belonging to the said city, as locations for station-houses and for fire apparatus houses.

Printed No. 9, G. O. 125. Introduced by Mr. Titus (Senate) :

An act to amend chapter 369 of the Laws of 1881, entitled "An act to provide for the performance of services in Supreme Court and Court of Appeals by stenographers."

Printed No. 108, G. O. 320. Introduced by Mr. Fassett (Senate) :

An act to regulate the appointment of managers for the New York State Reformatory at Elmira.

Printed No. 408, G. O. 401. Introduced by Mr. Maher :

An act authorizing the Superintendent of Public Works to lease the right of way across State land at tide water for ferry purposes.

Printed No. 446, G. O. 411. Introduced by Mr. Clarke :

An act in relation to the payment of interest on certain certificates of indebtedness of the late town of Morrisania, Westchester county, and authorizing the audit and payment thereof.

Printed No. 458, G. O. 419. Introduced by Mr. Littlejohn :

An act to supply the city of Oswego with pure and wholesome water.

Printed No. 459, G. O. 420. Introduced by Mr. Earl :

An act to authorize the election of an additional justice of the peace of the city of Brooklyn, and to create an additional district therein.

Printed No. 437, G. O. 479. Introduced by Mr. Pratt :

An act in relation to the appointment of bridge tenders on swing or lift bridges in the city of Rochester.

Printed No. 438, G. O. 480. Introduced by Mr. Baker :

An act in relation to the appraisal of canal claims against the State.

Printed No. 72, G. O. 66. Introduced by Mr. Clarke :

An act for the relief of Isaac Piser.

Printed No. 242, G. O. 242. Introduced by Mr. Higgins :

An act to regulate places of amusement in the city of New York, and the sale of tickets for admission to the same.

Printed No. 243, G. O. 243. Introduced by Mr. Kittle :

An act to divide the seventh judicial district of the city of New York and to create a new judicial district therefrom.

STATE OF NEW YORK.

No. 133.

IN ASSEMBLY,

MARCH 21, 1884

LIST OF GENERAL ORDERS.

G. O.

533. Introduced by Mr. Coffey:

An act to provide for the grading and paving of certain streets in the city of Brooklyn.

534. Introduced by Mr. Maher:

An act to increase the police force of the city of Albany.

535. Introduced by Mr. Kittle:

An act to authorize the comptroller of the city of New York to examine the claim of Robert T. Bailey, and to audit and pay the amount that may justly be due.

536. Introduced by Mr. Coffey:

An act in relation to the improvement and sale of certain lands adjacent to the city of Brooklyn.

537. Introduced by Mr. Clarke:

An act in relation to pavements in the city of New York.

538. Introduced by Mr. Clarke:

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York, relative to the tenure of office of clerks and assistant clerks of district courts in the city of New York."

539. Introduced by Mr. Maher:

An act to amend chapter 298 of the Laws of 1883, entitled "An act to provide for the government of the city of Albany."

540. Introduced by Mr. Van Cott:

An act directing the commissioners of charities and correction of the city of New York to establish a reception hospital in the upper part of said city.

G. O.

541. Introduced by Mr. Haggerty :

An act to amend chapter 550 of the Laws of 1880, entitled "An act relating to certain assessments for local improvements in the city of New York," passed June 9, 1880.

542. Introduced by Mr. Darragh :

An act to amend chapter 326 of the Laws of 1881, entitled "An act to amend chapter 318 of the Laws of 1880, entitled 'An act to amend chapter 410 of the Laws of 1878, entitled 'An act to improve Flushing avenue, Long Island City. ' "

543. Introduced by Mr. Zimmerman :

An act to amend section 29, title 3, of an act entitled "An act to provide for the government of the city of Albany," passed April 23, 1883.

544. Introduced by Mr. Speaker :

An act to authorize the city of New York to contribute \$50,000 in aid of the fund for the erection of a pedestal for Bartholdi's statue of "Liberty Enlightening the World," to be erected on Bedloe's island in New York harbor.

545. Introduced by Mr. Taylor :

An act to alter the commissioners' maps of the city of Brooklyn.

546. Introduced by Mr. Farrell :

An act to amend chapter 467 of the Laws of 1879, entitled "An act to amend chapter 459 of the Laws of 1877, entitled 'An act in relation to the salaries, fees, percentages and allowances of the officers of the city of Brooklyn.' "

547. (Senate.) Introduced by Mr. Newbold :

An act authorizing the board of education of the city of Poughkeepsie to sell and convey certain real estate owned by said district.

548. Introduced by Mr. O'Neil :

An act to provide for a more equal distribution of taxation in certain counties of the State.

549. Introduced by Mr. Heath:

An act making appropriation for the purchase of a camp ground for the use of the national guard of the State of New York, and for the improvement of the same.

550. Introduced by Mr. Forsyth :

An act to authorize the Board of Claims to hear and determine the claim of John Sewell and to make an award to pay the same.

551. Introduced by Mr. O'Neil :

An act to authorize the Commissioners of the Land Office to grant and convey to Robert Schroeder certain lands in Franklin county.

G. O.

552. Introduced by Mr. Harpending:

An act to more definitely ascertain the personal property liable to assessment and taxation in this State, and prescribing the mode of assessing the same.

553. Introduced by the Committee on Ways and Means:

An act to provide revenue for the State by a tax on savings banks and institutions for savings.

554. Introduced by Mr. Howe:

An act to extend the operations and effect of chapter 40, Laws of 1848, entitled "An act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes," passed February 17, 1848, and the amendments made thereto.

555. Introduced by Mr. Noxon:

An act to legalize the acts of the trustees of the First Presbyterian Church of Batchellorville in selling and conveying certain real estate.

556. Introduced by Mr. Nash:

An act to amend chapter 675 of the Laws of 1881, entitled "An act to facilitate the payment of school taxes by railroad companies, and the acts amendatory thereof."

557. Introduced by Mr. Haggerty:

An act to amend section 2234 of the Code of Civil Procedure.

558. Introduced by Mr. W. E. Smith:

An act to facilitate the transfer of stocks and registered bonds.

559. Introduced by Judiciary Committee:

An act to amend section 521 of the Code of Civil Procedure.

560. (Senate.) Introduced by Mr. Baker:

An act to amend section 258 of the Code of Civil Procedure.

561. Introduced by Mr. Haskell:

An act to provide for the disposition of Woodman's pond and a portion of the Chenango canal, and the lands, rights and other property connected therewith.

562. Introduced by Mr. Rice:

An act to confer additional powers upon the trustees and officers of incorporated villages in the State of New York.

563. Introduced by Mr. Taylor:

An act for the better government of the Inebriates Home for Kings county, and to amend chapter 483 of the Laws of 1868, entitled "An act to amend an act entitled 'An act to incorporate the Inebriates Home for Kings county.'"

564. Introduced by Mr. Curtis:

An act to amend subdivision 2 of the certificate of incorporation of the Northern Tier Masonic Mutual Relief Association.

G. O.

565. Introduced by Mr. Dibble :

An act to authorize the board of supervisors of Orleans county to audit claims for material used in constructing the county poor-house in said county.

566. (Senate.) Introduced by Mr. Baker:

An act to enable incorporated religious societies of the Protestant Episcopal Church in the diocese of western New York to make certain transfers of their real and personal estate to the corporation known as the Trustees of the Parochial Fund of the Protestant Episcopal Church in the diocese of Western New York, and to enable that corporation to take and hold the estate so transferred to it.

567. (Senate.) Introduced by Mr. Kiernan :

An act to amend an act entitled "An act to further amend chapter 19 of the Laws of 1858, entitled 'An act to incorporate the Long Island College Hospital of the city of Brooklyn, and the acts amendatory thereof,'" passed April 30, 1864, and April 2, 1879.

568. (Senate.) Introduced by Mr. Robb:

An act to amend an act entitled "An act to amend an act entitled 'An act to amend an act to incorporate the Association for the Benefit of Colored Orphans in the city of New York,' passed April 16, 1838," passed April 1, 1871," passed April 22, 1872.

569. Introduced by Mr. Church :

An act to amend an act entitled "An act to establish free schools in district number 3 in the town of Flushing," passed April 16, 1857, and to provide for the purchase of sites, the erection of school-houses, and the support and management of the schools in said district.

570. Introduced by Mr. Barnes :

An act to amend chapter 114 of the Laws of 1869, entitled "An act to amend an act entitled 'An act to consolidate and amend the several acts relating to the village of Watkins, and to enlarge the powers of the corporation of said village,'" passed April 3, 1861.

STATE OF NEW YORK.

No. 134.

IN ASSEMBLY,

MARCH 25, 1884.

LIST OF SPECIAL GENERAL ORDERS.

The Speaker and Clerk, with the consent of the House, referred the following bills to the sub-committee of the whole :

Printed No. 504, G. O. 454. Introduced by Mr. Moore:

An act to amend chapter 618 of the Laws of 1881, entitled "An act to constitute a separate road district in that portion of Northfield lying outside of the village of Port Richmond."

Printed No. 506, G. O. 458. Introduced by Mr. Howland:

An act to prevent obstruction of the highways by snow drifting.

Printed No. 505, G. O. 457. Introduced by Mr. Nelson:

An act to amend an act entitled "An act in relation to the weights and marks on casks and packages containing butter," passed April 24, 1865.

Printed No. 502, G. O. 554. Introduced by Mr. Howe:

An act to extend the operation and effect of chapter 40 of the Laws of 1848, entitled "An act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes," passed February 17, 1848, and the amendments made thereto.

Printed No. 497, G. O. 486. Introduced by Mr. Forsyth :

An act to amend chapter 692 of the Laws of 1870, entitled "An act to establish and maintain a police force in the city of Cohoes," as amended by chapter 269 of the Laws of 1873, and as further amended by chapter 482 of the Laws of 1879.

Printed No. 494, G. O. 443. Introduced by Mr. Hodges :

An act to authorize the registrar of arrears of the city of Brooklyn to accept certificates of sales for taxes in said city, made since the year 1862, in payment of certain taxes.

Printed No. 495, G. O. 444. Introduced by Mr. Forsyth :

An act to amend chapter 290 of the Laws of 1881, entitled "An act for the preservation of the public peace, the protection of pri-

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vate property, and the maintenance of law and good order in the first collection district of the town of Watervliet, in Albany county."

Printed No. 482, G. O. 432. Introduced by Mr. Clinton :

An act to amend chapter 336 of the Laws of 1883, entitled "An act to authorize the selection, location and appropriation of certain lands in the village of Niagara Falls for a State reservation, and to preserve the scenery of the Falls of Niagara."

Printed No. 481, G. O. 431. Introduced by Mr. Moore :

An act to authorize the State Board of Claims to hear and determine certain claims against the State.

Printed No. 480, G. O. 430. Introduced by Mr. Moore :

An act to authorize the State Board of Claims to hear and determine certain claims against the State.

Printed No. 478, G. O. 427. Introduced by Mr. Van Duzer :

An act to amend chapter 513 of the Laws of 1880, entitled "An act to regulate the licensing of physicians and surgeons."

Printed No. 477, G. O. 426. Introduced by Mr. Price :

An act to authorize the village of Jamestown to raise money to pay for water supplied for its use in extinguishing fires in said village.

Printed No. 472, G. O. 440. Introduced by Mr. Clarke :

An act in relation to stenographers in the district courts in the city of New York.

Printed No. 489, G. O. 275. Introduced by Mr. Van Allen :

An act to amend chapter 415 of the Laws of 1876, entitled "An act supplementary to chapter 737, Laws of 1873, entitled 'An act in relation to the creation and formation of water-works companies in towns and villages of the State of New York.'"

Printed No. 473, G. O. 423. Introduced by Mr. House :

An act to extend the length of the pier in the North or Hudson river between West Forty-first and Forty-second streets. New York city.

Printed No. 474, G. O. 424. Introduced by Mr. Butler :

An act to ratify and confirm certain grants made in pursuance of section 3 of chapter 702 of the Laws of 1873.

Printed No. 487, G. O. 438. Introduced by Mr. Forsyth :

An act to legalize and confirm the building and construction of a sewer in the city of Cohoes, called the Ravine sewer, from under or near the mill called or formerly called Brockway's mill, westerly through water-course or ravine north of Bridge street, to or near the bridge over the New York Central and Hudson River railroad at Johnston avenue, and to provide for the levying, assessment and collection of the expenses of such construction, and interest upon the lots benefited thereby.

STATE OF NEW YORK.

No. 135.

IN ASSEMBLY,

MARCH 26, 1884.

REPORT OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton submitted the report from the sub-committee of the whole, which was laid on the table and ordered printed.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 241, G. O. 240, entitled "An act to extend the jurisdiction of notaries public," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton
Kittle
Nason
Earl

Forsyth
Childs
Allen

Geddes
Ely
Clinton — 10.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 438, G. O. 480, entitled "An act in relation to the appraisal of canal claims against the State," reported in favor of the passage of the same with an amendment, by striking out all after the enacting clause and inserting as follows:

SECTION 1. In the construction or improvement hereafter of any canal or feeder, whereby the Superintendent of Public Works or other authorized agent of this State shall appropriate private lands, streams or waters, the said Superintendent of Public Works or other authorized agent of this State shall serve upon the owner, owner or occupant of said lands, streams or waters, a written or printed notice of such appropriation, duly signed by him, which notice shall contain an apt and sufficient description of the lands, streams or waters so appropriated.

§ 2. The board of claims shall have jurisdiction to hear, audit and determine the claim of the owner or owners of such lands, streams or waters and to allow thereon such sums as should be paid by the State, provided such claims shall be filed two years after the service of said written or printed notice as provided in section one of this act.

§ 3. The said board of claims whenever the appraised value of the premises appropriated shall be less than two hundred dollars, shall in their award make a reasonable allowance for the expenses of procuring the abstract of title and certificate of search as to incumbrances which statutes require shall be furnished the Comptroller before payment of any damages which may be awarded for the permanent appropriation of land or water.

§ 4. All acts or parts of acts inconsistent with the provisions of this act is hereby repealed.

§ 5. This act shall take effect immediately.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Allen	Pierson
Earl	Geddes	Clinton —10 .
Forsyth		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 253, G. O. 254, entitled "An act to amend chapter 695 of the Laws of 1876, entitled 'An act to amend an act entitled 'An act to extend the powers of boards of supervisors, except in the counties of New York and Kings,' passed May 11, 1869,'" reported in favor of the passage of the same with an amendment by striking out all after the enacting clause and inserting as follows :

SECTION 1. Section 5 of chapter 855 of the Laws of 1869, entitled "An act to extend the powers of boards of supervisors, except in the counties of New York and Kings," as amended by chapter 695 of the Laws of 1871, is hereby amended to read as follows ;

§ 5. The board of supervisors of any county, except New York and Kings, may, by a vote of two-thirds of all the members elected thereto, legalize the informal acts of any town meeting in raising money for any purpose for which such money is authorized to be raised by law, and by a like vote to legalize the irregular acts of any town officer performed in good faith, and within the scope of his authority, and also to correct any manifest clerical or other error in any assessments or returns made by any town officer to such board of supervisors, or which shall properly come before such board for their action, confirmation or review, and it may refund to any person the amount collected from him of any tax illegally or improperly assessed or levied. In raising the amount so refunded, such board shall adjust and apportion the same upon the property of the several towns and wards of the county as shall be just, taking into consideration the portion of State, county, town and ward tax included therein, and the extent to which each town or ward has been benefited thereby.

§ 2. This act shall take effect immediately.

The title was also amended so as to read, "An act to amend chapter 855 of the Laws of 1869, entitled 'An act to extend the powers of boards of supervisors, except in the counties of New York and Kings, as amended by chapter 695 of the Laws of 1871.'"

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Allen	Pierson
Forsyth	Geddes	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 308, G. O. 299, entitled "An act in relation to grants of land under water," reported in favor of the passage of the same with an amendment, by adding at the end of section 1 the words "the provisions of this act shall not apply to any lands in front of the city of Brooklyn."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Forsyth	Ely
Kittle	Childs	Pierson
Nason	Allen	Clinton — 11.
Earl	Geddes	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 446, G. O. 411, entitled "An act in relation to the payment of interest on certain certificates of indebtedness of the late town of Morrisania, Westchester county, and authorizing the audit and payment thereof," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Forsyth	Ely
Kittle	Childs	Pierson
Nason	Allen	Clinton — 11.
Earl	Geddes	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 408, G. O. 401, entitled "An act authorizing the Superintendent of Public Works to lease the right of way across State land at tide water for ferry purposes," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Forsyth	Geddes
Kittle	Childs	Ely
Nason	Allen	Pierson — 10.
Earl		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 372, G. O. 367, entitled "An act

for the better protection of game in Richmond county," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Earl	Allen
Kittle	Forsyth	Geddes
Nason	Childs	Pierson — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 390, G. O. 385, entitled "An act to amend an act entitled 'An act to extend Flushing avenue, to lay out and improve Flushing avenue and Newtown turnpike road from Broadway to the city line, and to extend other adjoining streets in the city of Brooklyn,' passed May 7, 1868," reported in favor of the passage of the same with amendments, as follows:

Section 1, line 1, strike out the first words "An act," and insert "chapter 674 of the Laws of 1868;" lines 8 and 9, strike out the words "and that part of Rock street lying east of Morgan avenue."

Also with an amendment of the title in the first line by striking out the first words "An act," and inserting "chapter 674 of the Laws of 1868."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Earl	Allen
Kittle	Forsyth	Geddes
Nason	Childs	Pierson—9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 449, G. O. 414, entitled "An act to authorize the board of fire commissioners of the city of New York to inquire into and determine the claim of George Nunn to be placed upon the pension-roll of the fire department of said city," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Earl	Allen
Kittle	Forsyth	Geddes
Nason	Childs	Pierson — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 385, G. O. 380, entitled "An act relating to the further supply of water for fire, sanitary and other purposes in the city of New York," reported in favor of the passage of the same with an amendment by striking out in line 11 of section 1 the words "due and."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Earl	Ely
Kittle	Forsyth	Pierson
Nason	Geddes	Clinton — 9.

For the Negative.

Childs	Allen — 2.
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Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 450, G. O. 415, entitled "An act to provide for a revision of the charter and ordinances of the city of Buffalo," reported in favor of the passage of the same with amendments as follows :

Section 1, lines 2 and 3, strike out the words "to be selected from each of the principal political parties."

Also by striking out section 2, and inserting in lieu thereof the following :

"Said commissioners may employ an attorney, or two attorneys, and may appoint a clerk. The commissioners shall receive no pay. The attorney or attorneys employed shall be paid for his or their services a sum or sums not exceeding three thousand dollars in the whole, and the clerk shall receive for his services the sum of one thousand dollars, which sums shall be paid by said city from its general fund. The said sums shall be paid in such amounts and at such times as said commissioners shall direct, but said clerk shall not receive more than one hundred dollars in each month, until said revision shall have been completed. The said common council shall allow the commission a sum not exceeding two hundred dollars out of the general fund of said city for books, stationery and other expenses."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Forsyth	Geddes
Kittle	Childs	Ely
Nason	Allen	Clinton — 10.
Earl		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 437, G. O. 479, entitled "An act in relation to the appointment of bridge tenders on swing or lift bridges in the city of Rochester," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Earl	Allen
Kittle	Forsyth	Geddes
Nason	Childs	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 72, G. O. 66, entitled "An act for the relief of Isaac Piser," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton
Kittle
Nason

Earl
Forsyth
Childs

Allen
Geddes
Clinton — 9.

STATE OF NEW YORK.

No. 136.

IN ASSEMBLY,

MARCH 27, 1884.

LIST OF GENERAL ORDERS.

G. O.

571. Introduced by Mr. Nagle :

An act further to amend chapter 863 of the Laws of 1873, entitled "An act to amend the charter of the city of Brooklyn," and the various amendments thereof.

572. Introduced by Mr. Clark :

An act to authorize the construction of a public bridge over the Harlem river in the city of New York.

573. Introduced by Mr. Haggerty :

An act for the relief of Mary A. Vandewater, administratrix of Henry Vandewater, deceased.

574. Introduced by Mr. House :

An act concerning the location of municipal offices.

575. Introduced by Mr. Van Cott :

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York."

576. Introduced by Mr. Howe :

An act to amend an act entitled "An act to provide new reservoirs, dams and a new aqueduct with the appurtenances thereto, for the purpose of supplying the city of New York with an increased supply of pure and wholesome water," passed June 1, 1883.

577. Introduced by Mr. Burns :

An act further to amend chapter 863 of the Laws of 1873, entitled "An act to amend the charter of the city of Brooklyn," and the various amendments thereof.

578. (Senate.) Introduced by Mr. Gibbs :

An act to fix and regulate the terms of office of certain public officers in the city of New York.

G. O.

579. (Senate.) Introduced by Mr. Comstock :

An act to amend section 9 of title 4 of chapter 129 of the Laws of 1872, as amended by section 9 of chapter 813 of the Laws of 1873, relative to the city of Troy.

580. (Senate.) Introduced by Mr. Murphy :

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and declare the special and local laws affecting public interests in the city of New York."

581. (Senate.) Introduced by Mr. Plunkitt :

An act to incorporate the college of midwifery in the city of New York.

582. Introduced by Mr. Van Cott :

An act to repeal section 2 of chapter 276 of the Laws of 1883, entitled "An act to amend chapter 410 of the Laws of 1882, entitled 'An act to consolidate into one act and to declare the special or local laws affecting public interests in the city of New York.' "

583. Introduced by Mr. Darragh :

An act to amend chapter 268 of the Laws of 1877, entitled "An act in relation to the collection of taxes and the sales of land therefor in certain towns in Queens county," passed May 10, 1877, and the several acts amendatory thereof.

584. Introduced by Mr. Moore :

An act to establish a board of county assessors in the county of Richmond.

585. Introduced by Mr. Veeder :

An act to amend chapter 284 of the Laws of 1874, entitled "An act to authorize the town of Glenville, Schenectady county, to purchase the bridge belonging to the Schenectady Bridge Company," passed April 29, 1874.

586. Introduced by Mr. S. W. Johnson :

An act to amend chapter 217 of the Laws of 1865, entitled "An act to establish the office of receiver of taxes and assessments in the town of East Chester in the county of Westchester, New York."

587. Introduced by Mr. Hunt :

An act to enable the people of the several counties to prohibit the importation and sale of intoxicating liquors.

588. (Senate.) Introduced by Mr. Titus :

An act in relation to the examination of the accounts, etc., of the surrogates' court, and the transfer of the moneys and securities to the county treasurer.

580. Introduced by Mr. Burns :

An act to protect consumers of illuminating gas.

590. Introduced by Mr. Oliver :

Concurrent resolution proposing amendment to section 9 of

G. O.

article 8 of the Constitution, guaranteeing to cities the right of municipal self-government, republican in form, and restricting the power of the Legislature to the enactment of general laws in reference thereto.

591. Introduced by Mr. Veeder :

An act to incorporate the Schenectady City Railway Company.

592. Introduced by Mr. Van Allen :

An act to amend an act entitled "An act to authorize the formation of corporations for the purpose of acquiring, constructing and operating railroads in foreign countries," passed June 3, 1881.

593. Introduced by Mr. Taylor :

An act to provide the board of education of the city of Brooklyn a suitable place for the instruction, discipline and confinement, when necessary, of truant, idle, vagrant and other children growing up in ignorance, and to enable said board more effectually to deal with and manage such children in said city.

594. Introduced by Mr. Olin :

An act for the relief of non-resident tax payers who, or whose children or wards are attendants at any free school.

595. (Senate.) Introduced by Mr. McCarthy :

An act to amend chapter 268 of the Laws of 1882, entitled "An act to provide for the incorporation of the alumni of colleges and universities in the State of New York."

596. Introduced by Mr. Curtis :

An act to regulate the manufacture and sale of butter, oleo-margarine and lardine.

597. (Senate.) Introduced by Mr. Baker :

An act making an appropriation for the construction of additional buildings at the Soldiers and Sailors' Home, at Bath.

598. Introduced by Mr. Van Cott :

An act to amend chapter 281 of the Laws of 1833, entitled "An act to prevent persons from transacting business under fictitious firm names."

599. Introduced by Mr. Clinton :

An act to amend chapter 154 of the Laws of 1882, entitled "An act to protect primary elections and conventions of political parties, and to punish offenses committed thereat."

600. Introduced by Mr. Van Cott :

An act to amend chapter 225 of the Laws of 1880, entitled "An act to authorize the exchange of preferred stock for common stock of corporations, and to authorize the exchange of common for preferred stock of corporations."

STATE OF NEW YORK.

No. 137.

IN ASSEMBLY,

MARCH 28, 1884.

LIST OF GENERAL ORDERS.

G. O.

601. Introduced by Mr. Cartwright :

An act to prevent deception in sales of dairy products.

602. Introduced by Mr. S. D. Locke:

An act to amend chapter 598 of the Laws of 1870, entitled "An act to amend an act to incorporate the city of Troy," passed April 12, 1816, and the several acts amendatory thereof, and also to amend other acts relating to the city of Troy and supplemental thereto.

603. Introduced by Mr. Van Allen :

An act to provide for the payment of the expenses of certain proceedings for the judicial determination of the term of and title to the office of judge of the superior court of the city of New York.

604. Introduced by Mr. Van Allen :

An act to amend chapter 276 of the Laws of 1883, entitled "An act to amend chapter 410 of the Laws of 1882, entitled 'An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York.'"

605. Introduced by Mr. Hooley :

An act to amend chapter 328 of the Laws of 1880, entitled "An act to establish and maintain a police force in the city of Troy," and the several acts amendatory thereof and supplemental thereto.

606. Introduced by Mr. Nagle :

An act to authorize the common council of the city of Brooklyn to construct a dock at the foot of Pearl street.

607. Introduced by Mr. Roche :

An act to amend chapter 249 of the Laws of 1875, entitled "An act to regulate the use of slips, wharves and piers in the city of New York," passed May 6, 1875.

[Assem Doc. No. 137.]

G. O.

608. Introduced by Mr. Price :

An act to provide for the removal of obstructions to navigation in the outlet of Chautauqua lake in the county of Chautauqua, and to appropriate certain moneys for such purpose.

609. Introduced by Mr. Van Duzer :

An act to amend chapter 370 of the Laws of 1875, entitled "An act to amend and consolidate the several acts relating to the city of Elmira," and the acts amendatory thereof.

610. (Senate.) Introduced by Mr. Jacobs :

An act making an appropriation for certain contingent expenses of the Legislature.

STATE OF NEW YORK.

No. 138.

IN ASSEMBLY,

MARCH 28, 1884.

LIST OF SPECIAL ORDERS.

Wednesday, April 2, 1884, immediately after reading the journal :

Int. 500, introduced by Mr. Cartwright, entitled "An act to prevent deception in sales of dairy products."

[Assem. Doc. No. 138.] 1

STATE OF NEW YORK.

No. 139.

IN ASSEMBLY,

APRIL 1, 1884.

LIST OF GENERAL ORDERS.

G. O.

611. Introduced by the Insurance Committee :

An act to provide for the transfer of securities and property of bankrupt corporations to the receivers of such corporations.

612. Introduced by Mr. Walrath :

An act to provide for the payment of certain claims for work done and material furnished in constructing water-works in the village of Amsterdam.

613. Introduced by Mr. Baker :

An act to provide for the erection of an iron foot bridge over the Champlain canal in the village of Whitehall.

614. Introduced by Mr. Lewis :

An act in relation to the navigation of the Erie canal.

[Assem Doc. No. 139.]

STATE OF NEW YORK.

No. 140.

IN ASSEMBLY,

APRIL 2, 1884.

REPORT OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 502, G. O. 554, entitled "An act to extend the operation and effect of chapter 40 of the Laws of 1848, entitled 'An act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes,' passed February 17, 1848, and the amendments made thereto," reported in favor of the passage of the same with amendments as follows:

Section 1, lines 2 and 3, strike out the words "the act," and insert "chapter 40 of the Laws of 1848;" lines 4 and 5, strike out the words "passed April 17, 1848."

Add at the end of section 4 the following: "And the comptroller of the said city of New York is hereby authorized to issue revenue bonds of said city in sufficient amounts to raise such sums as the said commissioners of the sinking fund shall certify to be necessary to execute any contract made in behalf of said city, under the authority hereby conferred; and a sum sufficient to pay said bonds with the interest thereon shall be included in the final estimate and raised by taxation, either in the year in which said bonds are issued, or in the following year."

Also, with an amendment to the title by striking out the words "passed February 17, 1848."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton
Kittle
Walrath

Allen
Geddes
Haskell

Priddy
Pierson
Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 326, G. O. 327, entitled "An act to authorize the Board of Claims to hear, audit and determine the claims of the State for balances due on the books of the Comptroller from certain counties," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 506, G. O. 458, entitled "An act to prevent obstruction of the highways by snow drifting," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 481, G. O. 431, entitled "An act to authorize the State Board of Claims to hear and determine certain claims against the State," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 504, G. O. 454, entitled "An act to amend chapter 618 of the Laws of 1881, entitled "An act to constitute a separate road district in that portion of Northfield lying outside of the village of Port Richmond," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 480, G. O. 430, entitled "An act to authorize the State Board of Claims to hear and determine certain

claims against the State," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 389, G. O. 384, entitled "An act to prevent the supervisors of the county of Erie conveying lands in public streets," reported in favor of the passage of the same with amendments, as follows:

Section 1, line 3, strike out the word "its;" same line, after the word, "interest," insert, "of the said county."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 212, G. O. 205, entitled "An act to repeal chapter 120 of the Laws of 1862, entitled "An act requiring the highway tax of the New York Central Railroad Company through the town of Mentz to be applied to the repairs of certain highways in the said town," and the several acts amendatory thereof, reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 472, G. O. 440, entitled "An act in relation to stenographers in the district courts in the city of New York," reported in favor of the passage of the same with amendments as follows:

Section 1, line 2, after the word "several" insert "civil and police;" lines 2 and 3, strike out the words "the civil and police district courts."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 458, G. O. 419, entitled "An act to supply the city of Oswego with pure and wholesome water, reported in favor of the passage of the same with amendments, by striking out all after the enacting clause and inserting as follows :

SECTION 1. The people of the city of Oswego, at the next regular charter election of the said city after the passage of this act, shall elect by ballot three persons, who shall thereafter be known as "the board of water commissioners of the city of Oswego," and who shall hold their offices respectively for one, two and three years, the commissioners to determine among themselves by lot who shall hold office for the term of one year, who for the term of two years, and who for the term of three years; and at each regular charter election thereafter, one person shall be elected to serve three years, to take the place of the one whose term of office is about to expire. Whenever more than one commissioner is to be elected, all ballots shall contain one name less than the number to be elected, and those receiving the greatest number of votes shall be declared elected.

§ 2. It shall be the duty of said commissioners to examine and consider all matters relative to supplying the city of Oswego with a sufficient quantity of pure and wholesome water for public and private purposes.

§ 3. Said commissioners are authorized to employ chemists, engineers, surveyors, and such other persons, and to do whatever, in their opinion, may be necessary to ascertain the best and most expedient plan for procuring such supply of water, and make surveys, maps and plans, together with estimates of the cost of the same; such plans may contemplate the purchase of any water-works, with the pipes, machinery, appliances and other property, or any part thereof; and shall, on or before the first day of February, 1886, submit a report of the plan adopted by them, and the estimated cost thereof, with analysis of water taken from Lake Ontario, also with analysis of water taken from the Oswego river, to the common council of said city, together with such information bearing upon the subject-matter as they may deem necessary, and in such report they shall state the terms on which the Oswego Water-Works Company will furnish such quantity of water as the city may require, from the Oswego river, and on what terms it will sell its property to the city, and the same shall be duly published, with the proceedings of said common council, and shall be submitted to the tax payers of said city for examination at the office of said commissioners for at least sixty days.

§ 4. After said report as provided in section 3 of this act has been made to the common council, and submitted for inspection to the tax payers for at least sixty days, said commissioners shall proceed to place the work for providing said city with water under contract; and they shall advertise for sealed proposals for at least six weeks, and the work shall be let to the lowest bidder, who shall be required to furnish good and sufficient security for the faithful performance of said contract. Said contract shall include all work and materials for completing said water-works according to the plans and specifications, and shall provide that said water-works shall be completed for a sum certain, to be named in said contract, and said contract shall contain provisions rendering it

void, if the tax payers, at a special election as herein provided, do not approve of said contract, and said commissioners shall have power to borrow, from time to time, upon the credit of said city of Oswego, an amount not exceeding the amount named in said contract, together with estimated cost for the right of way, purchase of necessary land and estimated cost of a proper supervision of the work while in process of construction, upon such terms of credit, not exceeding thirty years, and at a rate of interest not exceeding five per cent per annum, and to secure said loan the said commissioners are authorized to make, execute and sell at not less than par, from time to time, as may be necessary, bonds or written obligations, which shall be registered by the clerk of the city of Oswego, signed by the mayor and clerk, and sealed with the corporate seal of said city, and countersigned by the president of the board of water commissioners, which said bonds or obligations in writing, and the interest thereon, shall be a valid lien against said city of Oswego, and the credit of said city is pledged for the payment of the same. The said bonds or written obligations shall be given to the treasurer of the city of Oswego, who shall receive the proceeds of the same and place them to the credit of said board of water commissioners, and shall therefrom pay the drafts of said commissioners whenever the same may be presented. But no bond or obligation shall be issued under this act until the proposition to build new water-works has been first submitted and approved by a vote of the tax payers of the city of Oswego, at a special election to be held for that purpose as herein provided. And the common council of the city of Oswego shall, at the request of said commissioners, cause a special election of the tax payers of the city of Oswego to be held at the City Hall or other place named by said commissioners, in said city, on a day to be named by said commissioners, which said special election shall be ordered and conducted as follows: Said common council shall cause notice of said election to be published daily, Sundays excepted, in all the daily newspapers of the city of Oswego, for at least ten days. Said notice shall state where said election shall be held, and the day when it shall be held, and the hour when the poll shall be opened, and the hour when the poll shall be closed, and said notice shall state that the object of said special election is to receive the expression of the taxable voters of the city of Oswego, as to their approval or disapproval of the plan and contract made by the board of water commissioners, for bonding the city and supplying the city of Oswego with water. Said notice shall also state the amount given to said common council by said commissioners, as the sum necessary to be raised for the purpose of supplying said city with water. The inspectors of election of the third ward of the city of Oswego, at the time said special election may be held, shall act as a board of inspectors for the poll of said special election, and said inspectors shall take the oath required by law to be taken by inspectors of charter elections in said city, and in the same manner, and they shall have the same power and perform like duties as inspectors at charter elections. Every male resident of said city, of the age of twenty-one years whose name shall be in the assessment-roll, made by the assessors of said city, next preceding said special election, and upon whose property, or upon whom as the owner or possessor of property, a tax shall be assessed or imposed in and by said roll, and no other person or persons whatever,

shall be entitled to vote at said special election. Every executor, administrator, trustee, devisee, heir or guardian mentioned or named in said roll, as the possessor or representative of property assessed therein, shall, if he is a resident and twenty-one years of age, be considered a qualified voter as aforesaid. The assessors for the city of Oswego at the time said election may be held shall attend at the polls of said special election with the assessment-rolls, during the time said polls are open, and it shall be the duty of said assessors, or one of them, at said special election, to check the name of each voter on said assessment-roll as he votes. The inspectors of said election, on the day and at the place specified, and from nine o'clock in the forenoon until sunset, without closing the polls, and in the manner provided by law for holding charter elections, shall proceed to receive the ballots of the persons qualified to vote at said special election, on which ballots shall be written or printed, or partly printed and partly written, on the inside thereof, the words "For new water-works," or "against new water-works," and deposit the same in a box similar to the boxes required to be used at the said charter elections. If any person offering a vote at such election shall be challenged in relation to his right to vote thereat by any other person, one of the inspectors shall tender to him the following oath: "You do swear (or affirm) that you are a resident of the city of Oswego and are of the age of twenty-one years, and that you have not voted at this election." If he shall take said oath and shall be named and assessed upon said roll as aforesaid, his vote shall be received. If he shall decline to take said oath, his vote shall be refused. All the provisions of law for punishing false swearing and fraudulent voting, and of buying or offering to buy, or of selling or offering to sell votes at any charter election, so far as the same may be applied, and for preserving order at the polls, shall be applicable to the said special election and the proceedings thereat. The said inspectors shall canvass the votes received at said special election immediately after closing the polls, without adjournment, and then make a certificate under their hands, or the hands of two of them, stating the whole number of ballots received, the whole number "for new water-works," and the whole number "against new water-works," and return the same by the hands of one of them to the mayor or the clerk of the city of Oswego, on the same day or the day next succeeding the day of said election. The said certificate shall be delivered by said mayor or said clerk to the common council at their next meeting after said election, and the said council shall cause the result of said election, as appearing by said certificate, to be entered in their minutes, and if it shall appear that the whole number of votes received at such election with the words "for new water-works" shall exceed the whole number of votes with the words "against new water-works," it shall be the duty of said commissioners to proceed with the work of providing the city of Oswego with water as in this act provided.

§ 5. The common council of said city shall pay from time to time, as said commissioners may require, all expenses incurred by such commissioners under the provisions of this act, up to the time said plans are adopted or rejected by the tax payers of said city at said special election, as provided in section 4 of this act, and to include the same in their budget, and levy and collect the same, provided the amount for this purpose shall not exceed the sum of three thousand dollars.

§ 6. No person shall be eligible to the office of water commissioner who is or may be directly or indirectly interested in or employed by the Oswego Water-Works Company, and no commissioner, or any of their employees, shall be interested in the purchase of any materials or in any contract made by said commissioners.

§ 7. No commissioner shall receive any compensation for his services.

§ 8. Commissioners elected by virtue of this act shall be residents of said city, and shall within ten days after said election qualify, by taking the usual oath required by the charter of said city. And before entering on the duties of his office each commissioner shall file a bond with the clerk of the city of Oswego, in the sum of ten thousand dollars, with sufficient sureties to be approved by the mayor of said city, for the faithful performance of his duty as such commissioner, and to account for and pay over all money received by him under the provisions of this act.

§ 9. The common council of the city of Oswego is hereby authorized and directed to raise from time to time, by tax upon the estates, real and personal, subject to tax in said city, the sum or sums of money which may be required to pay the interest on said bonds or written obligations and to redeem them at maturity.

§ 10. All moneys received for the use of water shall be immediately paid over to the city treasurer, and be by him placed to the credit of the board of water commissioners of the city of Oswego, and all surplus after paying current expenses shall be applied in payment of interest and principal on the bonds or obligations given for the purpose of constructing said water-works.

§ 11. The said commissioners are hereby authorized to enter into or upon any land or water for the purpose of making surveys; and they are also authorized to agree with the owner of any property, real or personal, as to the amount to be paid for the same, which in their judgment may be required for the purposes of this act. In case of disagreement between the commissioners and the owner of any such property, rights or easements, as to the amount of compensation to be paid, or in case any such owner shall be an infant, insane, absent from the State or unknown, or the owners of any uncertain or contingent interest, the Supreme Court, at any Special Term, upon the application of said commissioners, after ten days' personal notice to such owners, to be served upon an infant or insane person in the same manner that a summons in a civil action in the Supreme Court is required by law to be served upon them, or when such notice cannot be served within the State, or the party in interest is unknown, after three weeks' notice of such application shall have been published in all the daily newspapers of the city of Oswego, shall appoint three disinterested persons as commissioners to ascertain and appraise the compensation to be made to such owners, who, upon being duly sworn faithfully and impartially to discharge their duties, shall examine the said property, and estimate, determine and report to said court the several sums which will be a just compensation to such owners, respectively, for the appropriation to the purpose of this act of any property, right, easements which may be so required, or for the temporary use thereof.

§ 12. Whenever such report shall have been confirmed by the Supreme Court the said commissioners may deposit or pay to such owners, or to such other person or persons as the said court shall direct, the sums

mentioned in said report as and for full compensation for the said property so required, and upon furnishing satisfactory proof thereof to the said court, an order shall be made stating the said proceedings and such payment or deposit, which order shall be *prima facie* evidence in all courts of the facts therein recited, which shall be recorded in the records of the deeds in the clerk's office of Oswego county, and thereupon the city of Oswego shall become and be seized in fee of the property and rights so acquired, and shall be discharged from all claims and demands by reason of the appropriation and use thereof.

§ 13. The said commissioners and persons acting under their authority shall have the right to use any street, highway or road in the city of Oswego for the purpose of laying pipes and conduits and introducing water into and through any portion of said city. They shall cause the surface of said street, highway or road to be restored to its former state as nearly as may be practicable.

§ 14. The said commissioners shall make such by-laws, rules and regulations for the preservation, protection and management of the said water-works, and the use and control of the water, and rates to be charged, and payment of same, as they shall deem advisable.

§ 15. This act shall take effect immediately.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Pierson
Earl	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 124, G. O. 375, entitled "An act to authorize and direct the county clerks of Dutchess and Chemung counties to record certain notices of pendency of action now on file in the county clerk's office of Dutchess and Chemung counties, and to prepare suitable indexes to the record of notices of pendency of action in said offices," reported in favor of the passage of the same with amendments as follows to the engrossed bill:

Section 1, line 1, after the word "Cayuga" insert "Tompkins;" line 2, after the word "counties" insert "respectively."

Section 4, line 5, after the word "Cayuga" insert "Tompkins."

Also with amendments to the title in lines 3 and 8, after the word "Cayuga" insert "Tompkins."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Forsyth	Priddy
Kittle	Walrath	Pierson
Earl	Allen	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Sanate bill No. 27, G. O. 195, entitled "An act to

amend chapter 511 of the Laws of 1881, entitled 'An act in relation to certain public parks in the city of Albany,' reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 159, G. O. 464, entitled "An act to amend section 15 of title 9 of chapter 519 of the Laws of 1870," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 142, G. O. 487, entitled "An act to amend section 50, title 7, chapter 555, Laws of 1864, entitled 'An act to revise and consolidate the general acts relating to public instruction,' and the acts amendatory thereof and supplementary thereto," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 9, G. O. 125, entitled "An act to amend chapter 369 of the Laws of 1881, entitled 'An act to provide for the performance of services in the Supreme Court and Court of Appeals by stenographers,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 108, G. O. 320, entitled "An act to regulate the appointment of managers for the New York State Reformatory at Elmira," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 57, G. O. 133, entitled "An act to authorize and empower the commissioners of the sinking fund of the city of New York to appropriate and set apart land belonging to the said city, as locations for station-houses and for fire apparatus houses," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

- Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 139, G. O. 432, entitled "An act to amend chapter 336 of the Laws of 1883, entitled 'An act to authorize the selection, location and appropriation of certain lands in the village of Niagara Falls for a State reservation, and to preserve the scenery of the Falls of Niagara,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 126, G. O. 374, entitled "An act relative to certificates of sales by sheriffs of real property," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Pierson
Earl	Geddes	Clinton — 11.
Forsyth	Haskell	

STATE OF NEW YORK.

No. 141.

IN ASSEMBLY,

APRIL 3, 1884.

LIST OF GENERAL ORDERS.

G. O.

615. Introduced by Mr. Husted :

An act to provide for submitting an amendment to section 11 of article 8 of the Constitution to the electors of the State.

616. (Senate.) Introduced by Mr. Fassett :

An act to amend chapter 466 of the Laws of 1877, entitled "An act in relation to assignments of the estates of debtors for the benefit of creditors."

617. Introduced by Mr. House :

An act to legalize all medical degrees and diplomas granted prior to the passage of this act by the United States Medical College in the city of New York.

618. Introduced by Mr. Husted :

An act providing for the corporal punishment of male persons in certain cases.

619. Introduced by Mr. Van Cott :

An act in relation to attorneys in criminal proceedings.

620. (Senate.) Introduced by Mr. Thomas :

An act to provide for changing the site of county buildings.

621. Introduced by Mr. Wilcox :

An act to amend chapter 358 of the Laws of 1863, entitled "An act establishing a quarantine, and defining the qualifications, duties and powers of the health officer for the harbor and port of New York."

622. (Senate.) Introduced by Mr. Thomas.

An act to amend the Code of Civil Procedure.

623. (Senate.) Introduced by Mr. Ellsworth :

An act to amend section 2818 of the Code of Civil Procedure.

G. O.

624. (Senate.) Introduced by Mr. Murphy :

An act to incorporate Grand Conservatory of Music of the city of New York.

625. Introduced by Mr. Taylor :

An act to amend the Code of Civil Procedure.

626. (Senate.) Introduced by Mr. Murphy :

An act to amend the Penal Code.

627. (Senate.) Introduced by Mr. Ellsworth :

An act to amend the Code of Criminal Procedure.

628. (Senate.) Introduced by Mr. Thacher :

An act to amend the Code of Criminal Procedure.

629. Introduced by Mr. Hooley :

An act relating to the liberty of employees in this State.

630. Introduced by Mr. Van Allen :

Concurrent resolution proposing an amendment to section 11 of article 8 of the Constitution, prohibiting the loan or use of public money for private purposes, and restricting the indebtedness of counties, cities, towns and villages.

631. Introduced by Mr. O'Neil :

Concurrent resolution proposing amendments to section 6 of article 10, and sections 2, 5 and 6 of article 3 of the Constitution, providing for biennial sessions of the Legislature.

632. Introduced by Mr. Husted :

An act to incorporate the Veteran Military Association, 71st Regiment, N. G. S. N. Y.

633. Introduced by Mr. Husted .

An act to incorporate the New York Cancer Hospital.

634. Introduced by Mr. Husted :

An act to incorporate the Good Samaritan Dispensary in the city of New York.

635. Introduced by Mr. Kruse :

An act for the prevention of crime.

636. Introduced by Mr. Van Cott :

An act to amend chapter 305 of the Laws of 1878, entitled " An act to provide for a police commission in the town of New Lots, Kings county, and to establish a police force therein."

637. (Senate.) Introduced by Mr. Thomas :

An act to amend chapter 365 of the Laws of 1862, entitled " An act to authorize the discharge of mortgages of record in certain cases as amended by chapter 798 of the Laws of 1868, and chapter 551 of the Laws of 1873."

G. O.

638. Introduced by Mr. Rosenthal :

An act to extend and define the powers of the Collateral Loan Association.

639. (Senate.) Introduced by Mr. Low :

An act to enable tax-payers to make application for the discharge of judgment debtors from imprisonment.

640. Introduced by Mr. Husted :

An act to provide for the establishment of wills during the life of testators.

641. Introduced by Mr. Westfall :

An act to amend the Code of Criminal Procedure.

642. Introduced by Mr. Higgins :

An act to amend the Code of Civil Procedure.

643. (Senate.) Introduced by Mr. Thacher :

An act to amend the Code of Criminal Procedure.

644. Introduced by Mr. Miles :

An act to regulate the publication of notices by the county treasurer of Rensselaer county of sales of real estate for unpaid taxes and for redemption from such sales.

645. Introduced by Mr. Miles :

An act to amend an act entitled "An act fixing certain fees of the sheriff of the county of Rensselaer," passed April 7, 1858.

646. Introduced by Mr. Priddy :

An act to provide for the maintenance of prisoners sent to the Cayuga county jail from the several towns and the city of Auburn in the county of Cayuga.

647. Introduced by Mr. Tremper :

An act to regulate the public printing in the city of Kingston.

648. Introduced by Mr. Veeder :

An act to provide for the payment of wages of operatives and laborers of domestic corporations placed in the hands of a receiver other than of insurance and moneyed corporations.

649. Introduced by Mr. Littlejohn :

An act making an appropriation for the payment of awards made by the Board of Claims.

650. (Senate.) Introduced by Mr. Vedder :

An act to further amend chapter 312 of the Laws of 1859, entitled "An act to equalize the State tax among the several counties in the State," as amended by chapter 327 of the Laws of 1873, and chapter 351 of the Laws of 1874, and chapter 80 of the Laws of 1880.

STATE OF NEW YORK.

No. 142.

IN ASSEMBLY,

APRIL 3, 1884.

REPORT

OF THE COMPTROLLER IN RESPONSE TO A RESOLUTION
OF THE ASSEMBLY, PASSED MARCH 27, 1884.

STATE OF NEW YORK:

COMPTROLLER'S OFFICE,
ALBANY, April 2, 1883. }

To the Honorable the Assembly :

I have the honor to acknowledge the receipt of a resolution adopted by the Assembly on the 27th ult., of which the following is a copy:

“ *Resolved*, That the Comptroller be requested to communicate to the Assembly, a statement of the amount of fines received by him, during the past four years for trespasses on public lands, from whom collected, and what amounts, by whom collected and the expense of collecting the same.

By order,
C. A. CHICKERING,
Clerk.”

In reply thereto, I state that the following statement contains the information called for by said resolution, viz.:

Fines collected for depredations on State lands.

By whom paid.	To whom paid.	When received.	Amount.
Thos. Powers	Geo. Leavitt	May 31, 1881	\$200 00
A. C. Thurston	do	July 12, 1881	254 80
Ed. Butler.	do	July 12, 1881	80 00
Chas. Griffing.	do	Aug. 10, 1881	37 50
Faxon & Co.	do	Sept. 23, 1881	33 72
Edwin R. Derby.	D. H. Stanton.	Oct. 15, 1881	100 00
Butler	Geo. Leavitt.	Nov. 2, 1881	50 00
C. & P. Turner.	John P. Badger.	Dec. 24, 1881	75 00

Fines collected for depredations on State lands — (Continued).

By whom paid.	To whom paid.	When received.	Amount.
Mathew Meader.....	Henry S. Johnson.....	Jan. 24, 1882	\$200 00
E. Chadwick & Co.....	Geo. Leavitt.....	Feb. 23, 1882	50 00
W. H. Cramer.....	A. B. Steele.....	Feb. 23, 1882	175 00
Geo. W. Holmes.....	Russell M. Ormsbee....	March 27, 1882	15 00
Henry Atwell.....	do.....	March 27, 1882	50 00
Jerome Towner.....	do.....	March 27, 1882	20 00
Philip Poyca.....	D. H. Stanton.....	April 1, 1882	5 00
Smith & Deming and Sam'l Warner.	Geo. Leavitt.....	April 12, 1882	416 90
Edward Butler or Edward Tift.....	do.....	June 1, 1882	369 00
Jefferson Hammond, Chas. Mosher and Adolphus Kelsey.....	John Van Rensselaer...	July 18, 1882	103 10
Ransom Darling and Jacob Denton..	R. M. Ormsbee.....	July 26, 1882	20 00
Eli Flansburgh.....	do.....	Aug. 10, 1882	50 00
Wm. Harris.....	Geo. Leavitt.....	Aug. 15, 1882	235 00
Chas. Farr and Geo. Miner.....	do.....	Aug. 30, 1882	40 00
Chas. Farr and Geo. Miner.....	do.....	Sept. 7, 1882	4 00
Edward Russell.....	do.....	Sept. 30, 1882	31 00
Edward Russell.....	do.....	Sept. 30, 1882	32 75
Warren F. Weston.....	do.....	Nov. 3, 1882	20 00
Warren F. Weston.....	do.....	Nov. 3, 1882	50 00
R. B. Poole.....	E. Bronk.....	Nov. 9, 1882	300 50
John W. Bailey.....	Henry S. Johnson.....	Nov. 21, 1882	10 50
Edward M. Ladd.....	D. H. Stanton.....	Nov. 22, 1882	22 37
Sherman & Lapham.....	R. M. Ormsbee.....	Jan. 12, 1883	200 00
W. O. & G. D. Bleekman.....	E. Bronk.....	Jan. 16, 1883	180 00
Williams & Wilcox.....	H. S. Johnson.....	Feb. 2, 1883	304 65
Seth Allen and Jas. Cunningham....	do.....	Feb. 17, 1883	83 00
Hiram Danford.....	D. H. Stanton.....	Feb. 20, 1883	25 00
Wm. Mosher.....	E. Bronk.....	March 8, 1883	20 00
Jabez Alexander.....	D. H. Stanton.....	April 3, 1883	25 00
Johana Vincent.....	H. S. Johnson.....	April 6, 1883	11 25
Chas. Griffin.....	Geo. Leavitt.....	April 12, 1883	31 00
Jas. Bean.....	D. H. Stanton.....	April 18, 1883	20 00
Joel Sprague.....	do.....	May 9, 1883	12 00
Philip Browstrakner, Andrew Sperl and Benj. Wendover.....	A. B. Steele.....	May 16, 1883	15 69
Mr. Williams.....	Geo. Leavitt.....	June 14, 1883	20 00
Milton Barnes.....	E. Bronk.....	June 26, 1883	106 50
Mathew Meader.....	H. S. Johnson.....	July 20, 1883	97 78
Rob't Stackpole.....	do.....	July 20, 1883	14 00
Rob't Humphrey.....	R. M. Ormsbee.....	Aug. 22, 1883	7 00
Patriek Hanlon.....	D. H. Stanton.....	Oct. 27, 1883	250 00
John Fletcher.....	Geo. Leavitt.....	Dec. 6, 1883	15 00
Mathew Meader.....	R. Corbin.....	Dec. 19, 1883	150 00
Chas. Bennett.....	Geo. Leavitt.....	Jan. 15, 1884	27 00
Eames & Smith.....	Chas. E. Pease.....	Jan. 15, 1884	718 43
Charles H. Faxon.....	Geo. Leavitt.....	Jan. 23, 1884	157 00
Chas. Bennett.....	do.....	Jan. 23, 1884	9 00
Wm. H. Bloomingdale.....	do.....	Feb. 9, 1884	688 99
Rob't Bidleman.....	E. Bronk.....	March 13, 1884	19 50
Orlando J. Mosher.....	do.....	March 13, 1884	10 00
Wm. Mosher.....	do.....	March 13, 1884	15 00
John Davis.....	R. L. Trumhull....	March 15, 1884	479 45
Total of fines collected.....			\$6,763 38

Brought forward.....	\$6,763 38
Lenas Van Duzen is obligated to pay the State, on May 1, next, for the sale to him of timber, cut on State lands by Wm. H. Bloomingdale	1,065 16
In addition thereto, Joel C. Fuller, David Green, Chas. Swanson and one Wilkinson, who had previously cut on State lands, valued before depredated at \$4,073.50, and after depredated at \$1,505.50, were allowed during 1881, in full settlement therefor, to purchase said lands at the value thereof before depredation, which purchases were duly completed, and thus placed in the treasury, as fines virtually collected.....	2,568 00
Total amount of settled depredations.....	<u>\$10,396 54</u>

The approximate cost to the State for collecting the same is \$850.

The greater part of such fines were for trespasses committed prior to and during the time when ——— the Comptroller first assumed the duty of protecting and caring for State lands. Such lawlessness is now the exception and not the rule; as heretofore, and none of an extensive character are now reported. The amount collected during the several years, but which is not a reliable indication of the dates of the commission of the various trespasses, may be summarized as follows, viz.:

Year.	Amount collected.
1881.....	\$3,399 02
1882.....	2,220 12
1883.....	1,587 87
1884.....	3,189 53
	<u>\$10,396 54</u>

The Comptroller, as the official custodian of *all* State lands under authority of law, operative since January 1, 1881, has incurred expenses amounting to \$10,432.18 for serving notices, recording deeds, and perfecting titles, for protecting, examining, surveying, appraising and suing trespassers on State lands, wherever located, and for payment in full of appointed agents for all services rendered in connection therewith, in all the counties of the State, which sum includes all expenses for trespass cases, settled and unsettled, including the sum of \$1,442,77 expended in bringing to trial a large trespass committed by P. & J. Mitchell in the winter of 1880 and 1881, involving over \$30,000 in value of timber, which case is now on trial and is to be decided by the courts at the coming June term.

Respectfully submitted,

ALFRED C. CHAPIN,

Comptroller.

STATE OF NEW YORK.

No. 143.

IN ASSEMBLY,

APRIL 4, 1884.

LIST OF GENERAL ORDERS.

G. O.

651. Introduced by Mr. Husted:

An act to incorporate the Safety Elevator Insurance Company of New York.

652. (Senate.) Introduced by Mr. Campbell:

An act to amend the Code of Civil Procedure.

653. Introduced by Judiciary Committee:

An act to prohibit disfranchisement.

654. Introduced by Mr. Driess:

An act for the relief of Patrick Burry, late collector of school district number 6, in the towns of Pendleton and Lockport, in the county of Niagara.

655. Introduced by Mr. Coffey:

An act relating to telephone companies, and to regulate the use and rental of telephones.

656. Introduced by Mr. Kruse:

An act to tax gifts, legacies and collateral inheritances in certain cases.

657. (Senate.) Introduced by Mr. Kiernan:

An act to reduce, levy and confirm the assessment for the Bond street sewer in the city of Brooklyn, imposed under an act entitled "An act relating to sewers and drainage in the city of Brooklyn, passed April 23, 1879, and in relation to the payment of said assessment."

658. Introduced by Mr. Church:

An act to authorize the Brooklyn City Railroad Company to grant, sell and convey to the Broadway Railroad Company of Brooklyn, and the Broadway Railroad Company of Brooklyn to purchase of the Brooklyn City Railroad Company all the right, title and interest of the Brooklyn City Railroad Company in the Cypress Hill extension, so called, in the town of New Lots, in the county of Kings, and the real estate hitherto used in connection therewith.

G. O.

659. (Senate.) Introduced by Mr. Baker:

An act to provide for the construction, extension, maintenance and operation of street surface railroads, and branches thereof in cities, towns and villages.

660. Introduced by Mr. Heath :

An act to regulate shipping offices in the port and harbor of New York.

661. Introduced by Insurance Committee :

An act to provide for the valuation of life insurance policies issued by life insurance companies authorized to transact business in this State.

662. (Senate.) Introduced by Insurance Committee :

An act relating to corporations, associations and societies engaged in life or casualty insurance business upon the co-operative or assessment plan, pursuant to the provisions of chapter 175 of the Laws of 1883.

663. Introduced by Mr. Coffey:

An act to authorize the formation of the New York Transit Company.

664. (Senate.) Introduced by Mr. McCarthy:

An act devolving the care, management and administration of the affairs of the custodial Asylum upon the trustees of the Asylum for Idiots, and making the former asylum a branch of the latter.

665. (Senate.) Introduced by Mr. Ellsworth :

An act to amend chapter 409 of the Laws of 1882, entitled "An act to revise the statutes relating to banks, banking and trust companies."

666. Introduced by Mr. Howland:

An act to regulate the raising of taxes for extraordinary expenditures in the corporation of the village of Union Springs in the county of Cayuga.

667. Introduced by Mr. Kruse:

An act to amend chapter 151, of the Laws of 1882, entitled "An act to amend chapter 361, of the Laws of 1881, entitled 'An act to amend chapter 542, of the Laws of 1880, entitled 'An act to provide for raising taxes for the use of the State upon certain corporations, joint-stock companies and associations.'"

668. Introduced by Mr. Littlejohn :

An act in relation to certified copies of documents in the office of the board of railroad commissioners the fees to be charged therefor and providing for a seal for the use of the board.

G. O.

669. Introduced by Mr. Forsyth :

An act making appropriation for heating, ventilating, lighting and furnishing the new normal school building in Albany and for putting in order and fencing the grounds of the same.

670. Introduced by Mr. Husted:

An act to amend chapter 117, of the Laws of 1883, entitled "An act to amend, consolidate and revise the charter of the village of Peekskill," and the several acts amendatory thereof.

671. Introduced by Mr. Noxon :

An act to amend an act entitled "An act to provide for the disposal and removal of the sewage discharge from the village sewer running through and from the village of Saratoga Springs and to raise money by taxation for that purpose."

672. Introduced by Mr. S. D. Locke:

An act to repeal section 2, of chapter 8, of the Laws of 1816, passed February 14, entitled "An act to confirm the sale of certain common lands made by the trustees of the village of Lansingburgh and to provide for the fund therein mentioned."

673. (Senate.) Introduced by Mr. Thomas:

An act to amend an act entitled "An act to revise, amend and consolidate the Laws in relation to the village of Norwich, in the county of Chenango," being chapter 171 of the Laws of 1857.

674. (Senate.) Introduced by Mr. Thomas:

An act to amend chapter 324 of the Laws of 1850, entitled "An act for the preservation of public health" and the acts amendatory thereof.

STATE OF NEW YORK.

No. 144.

IN ASSEMBLY,

APRIL 8, 1884.

LIST OF SPECIAL GENERAL ORDERS.

The speaker and clerk, with the consent of the house, refer the following bills to the sub-committee of the whole:

Printed No. 550, G. O. 528. Introduced by Mr. Howe:

An act to provide for the appointment of commissioners to prepare and report to the Legislature a bill to facilitate and lessen the expense of the transfer of land and dealing therewith in certain cities of this State.

Printed No. 519, G. O. 471. Introduced by Mr. L. R. Locke:

An act to provide for and define the public or legislative printing.

Printed No. 364, G. O. 359. Introduced by Mr. Taylor:

An act in relation to extending certain streets and avenues in the city of Brooklyn beyond high-water mark.

Printed No. 426, G. O. 405. Introduced by Mr. Coffey:

An act to authorize the board of supervisors of Kings county to make suitable provision to reimburse John Cunningham for all legitimate costs, counsel fees and expenses which were incurred by him in and about a certain action brought against him while holding the office of commissioner of charities for the county of Kings.

Printed No. 524, G. O. 501. Introduced by Mr. C. W. Brown:

An act to prevent the spread of fowl brood among bees, and to extirpate the same.

Printed No. 277, G. O. 274. Introduced by Mr. C. W. Brown:

An act to amend chapter 611 of the Laws of 1875, entitled "An act to provide for the organization and regulation of certain business corporations."

Printed No. 496, G. O. 445. Introduced by Mr. House:

An act in relation to Gramercy park in the city of New York.

Printed No. 592, G. O. 558. Introduced by Mr. W. E. Smith :

An act to facilitate the transfer of stocks and registered bonds.

Printed No. 534, G. O. 513. Introduced by Mr. Priddy :

An act to amend chapter 170 of the Laws of 1866, entitled "An act to incorporate the village of Montezuma."

Printed No. 619, G. O. 617. Introduced by Mr. House :

An act to legalize all medical degrees and diplomas granted prior to the passage of this act by the "United States Medical College in the city of New York."

Printed No. 516, G. O. 466. Introduced by Mr. Darragh :

An act authorizing the construction of a draw-bridge over Newtown creek in Queens county.

Printed No. 376, G. O. 371. Introduced by Mr. Craig :

An act to provide for adjusting and enforcing the claim of the town of Corning against the New York, Lackawana and Western Railway Company by reason of the construction of the railway of said company upon and along that portion of a highway of said town running through the Chemung Narrows, and appointing commissioners for that purpose.

Printed No. 560, G. O. 535. Introduced by Mr. Kittle :

An act to authorize the comptroller of the city of New York to examine the claim of Robert T. Bailey, and to audit and pay the amount that may justly be due.

Printed No. 488, G. O. 439. Introduced by Mr. Clarke :

An act to provide for the proper removal of stable manure from the city of New York.

Printed No. 247, G. O. 247. Introduced by Mr. Becker :

An act to establish a state board of pharmacy, and to regulate the practice of pharmacy throughout the State of New York, except in the counties of New York, Kings and Erie.

Printed No. 641, G. O. 599. Introduced by Mr. Clinton :

An act to amend chapter 154 of the Laws of 1882, entitled "An act to protect primary elections and conventions of political parties and to punish offenses committed thereat."

Printed No. 549, G. O. 527. Introduced by Mr. W. E. Smith :

An act to amend chapter 547 of the Laws of 1855, entitled "An act allowing illegitimate children to inherit real and personal property in certain cases."

Printed No. 531, G. O. 510. Introduced by Mr. Van Allen :

An act to repeal an act entitled "An act to confer further power on the boards of supervisors," passed May 22, 1882.

Printed No. 553, G. O. 531. Introduced by Mr. Van Derzee :

An act to extend the authority of the treasurer of Chemung county, in the investment of moneys known as the railroad bonds sinking fund.

Printed No. 535, G. O. 463. Introduced by Mr. Van Allen :

An act to repeal certain acts and parts of acts therein named, so far as the same relate to or apply to or within the city and county of New York.

Printed No. 108, G. O. 320. (Senate.) Introduced by Mr. Fassett :

An act to regulate the appointment of managers for the New York State Reformatory at Elmira.

Printed No. 539, G. O. 518. Introduced by Mr. C. W. Brown:

An act to exempt the county of Chenango from the provisions and operations of chapter 346 of the Laws of 1883, entitled "An act to provide for the construction, care, maintenance, preservation and repair of public bridges over streams or other waters forming the boundary lines of counties, and to apportion the expense thereof."

Printed No. 540, G. O. 519. Introduced by Mr. Roosevelt:

An act to amend chapter 299 of the Laws of 1883, entitled "An act to provide for the enrollment of the militia, for the organization and government of the National Guard of the State of New York, and for the public defense, and entitled the Military Code."

Printed No. 515, G. O. 465. Introduced by Mr. Tremper:

An act to amend chapter 582 of the Laws of 1880, entitled "An act to provide for excavating and tunneling and bridging for transportation purposes within villages and cities of this State."

Printed No. 533, G. O. 512. Introduced by Mr. Tremper :

An act to enable the voters of the several towns of the State to create and elect boards of town auditors in such towns, and to prescribe their powers and duties.

Printed No. 127, G. O. 437. (Senate.) Introduced by Mr. Daggett:

An act to amend chapter 27 of the Laws of 1875, entitled "An act to designate the holidays to be observed in the acceptance and payment of bills of exchange, bank checks and promissory notes," as amended by chapter 30 of the Laws of 1881.

Printed No. 604, G. O. 573. Introduced by Mr. Haggarty.

An act for the relief of Mary A. Vandewater, administratrix of Henry Vandewater, deceased.

Printed No. 652 G. O. 612. Introduced by Mr. Walrath :

An act to provide for the payment of certain claims for work done and material furnished in constructing water-works in the village of Amsterdam.

Printed No. 600, G. O. 569. Introduced by Mr. Church :

An act to amend an act, entitled "An act to establish free schools in district number three in the town of Flushing," passed April 16, 1857, and to provide the purchase of sites, the erection of school-houses, and the support and management of the schools in said district.

Printed No. 538, G. O. 517. Introduced by Mr. Darragh:

An act to amend chapter 441 of the Laws of 1864, and to repeal chapter 451 of the Laws of 1880, entitled "An act supplementary to chapter 441 of the Laws of 1864, entitled 'An act in relation to the performance of highway labor in Queens county.'"

Printed No. 688, G. O. 461. Introduced by Mr. McDonald:

An act to lay out and establish a permanent exterior street along a portion of the East river in the city of New York, and to alter the map or plan of the city of New York to conform thereto.

Printed No. 517, G. O. 467. Introduced by Mr. Hodges:

An act to establish the pier line on the Brooklyn shore of the East river, between Bushwick and Newton creeks.

Printed No. 696, G. O. 658. Introduced by Mr. Church:

An act to authorize the Brooklyn City Railroad Company to grant, sell and convey to the Broadway Railroad Company of Brooklyn, and the Broadway Railroad Company of Brooklyn to purchase of the Brooklyn City Railroad Company all the right, title and interest of the Brooklyn City Railroad Company in the Cypress Hill extension, so called, in the town of New Lots in the county of Kings, and the real estate hitherto used in connection therewith.

STATE OF NEW YORK.

No. 145.

IN ASSEMBLY,

APRIL 9, 1884.

LIST OF GENERAL ORDERS.

975. Introduced by Mr. Binder :

An act to incorporate the State Executive Committee of the Young Men's Christian Association of the State of New York.

976. Introduced by Mr. Murray :

An act to secure inmates of institutions for the care of the poor, freedom of worship.

977. (Senate.) Introduced by Mr. Thomas :

An act to amend an act entitled "An act to amend the act entitled 'An act authorizing the incorporation of rural cemetery associations,' passed April 27, 1847, being chapter 163 of the Laws of 1860."

[Assem. Doc. No. 145.]

1

FORTY-THIRD ANNUAL REPORT

OF THE

New York State Agricultural Society,

For the Year 1883.

TRANSMITTED TO THE LEGISLATURE APRIL 7, 1884.

ALBANY:

WEED, PARSONS AND COMPANY, PRINTERS.

1884.



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OFFICERS FOR 1884.

PRESIDENT.

WILLIAM M. WHITE, - - - - of Livingston county.

VICE-PRESIDENTS.

<i>First District,</i>	-	-	-	CORNELIUS R. AGNEW, of New York.
<i>Second District,</i>	-	-	-	ISAAC H. COCKS, of Queens.
<i>Third District,</i>	-	-	-	JACOB I. VAN HOESSEN, of Rensselaer.
<i>Fourth District,</i>	-	-	-	ALFRED DEGRAFF, of Montgomery.
<i>Fifth District,</i>	-	-	-	JAMES GEDDES, of Onondaga.
<i>Sixth District,</i>	-	-	-	JOSEPH JULIAND, of Chenango.
<i>Seventh District,</i>	-	-	-	W. A. WADSWORTH, of Livingston.
<i>Eighth District,</i>	-	-	-	MARCUS H. PHILLIPS, of Orleans.

CORRESPONDING SECRETARY.

THOMAS L. HARRISON, - - - - St. Lawrence.

RECORDING SECRETARY.

WILLIAM H. BOGART, - - - - Cayuga.

TREASURER.

ADIN THAYER, - - - - Rensselaer.

EXECUTIVE COMMITTEE.

DAVIS COSSITT,	-	-	-	-	-	-	Onondaga.
GERRIT S. MILLER,	-	-	-	-	-	-	Madison.
CHARLES C. B. WALKER,	-	-	-	-	-	-	Steuben.
HENRY E. ALVORD,	-	-	-	-	-	-	Orange.
JAMES McCANN,	-	-	-	-	-	-	Chemung.
T. R. PROCTOR,	-	-	-	-	-	-	Oneida.
F. O. CHAMBERLAIN,	-	-	-	-	-	-	Ontario.
OSCAR J. LEWIS,	-	-	-	-	-	-	Rensselaer.

EX-PRESIDENTS.

HORATIO SEYMOUR,	-	-	-	-	-	-	Oneida.
N. MARTIN CURTIS,	-	-	-	-	-	-	St. Lawrence.
ROBERT J. SWAN,	-	-	-	-	-	-	Seneca.
JOHN D. WING,	-	-	-	-	-	-	New York.
GEORGE F. MILLS,	-	-	-	-	-	-	Montgomery.

<i>Mechanical and Consulting Engineer,</i>	-	HENRY WATERMAN.
<i>Consulting Veterinarian,</i>	-	JAMES LAW, M. R. V. C.
<i>Chemist,</i>	-	WM. M. HABIRSHAW, F. C. S.

STATE OF NEW YORK.

No. 146.

IN ASSEMBLY,

APRIL 7, 1884.

FORTY-THIRD ANNUAL REPORT

OF THE NEW YORK STATE AGRICULTURAL SOCIETY,
FOR THE YEAR 1883.

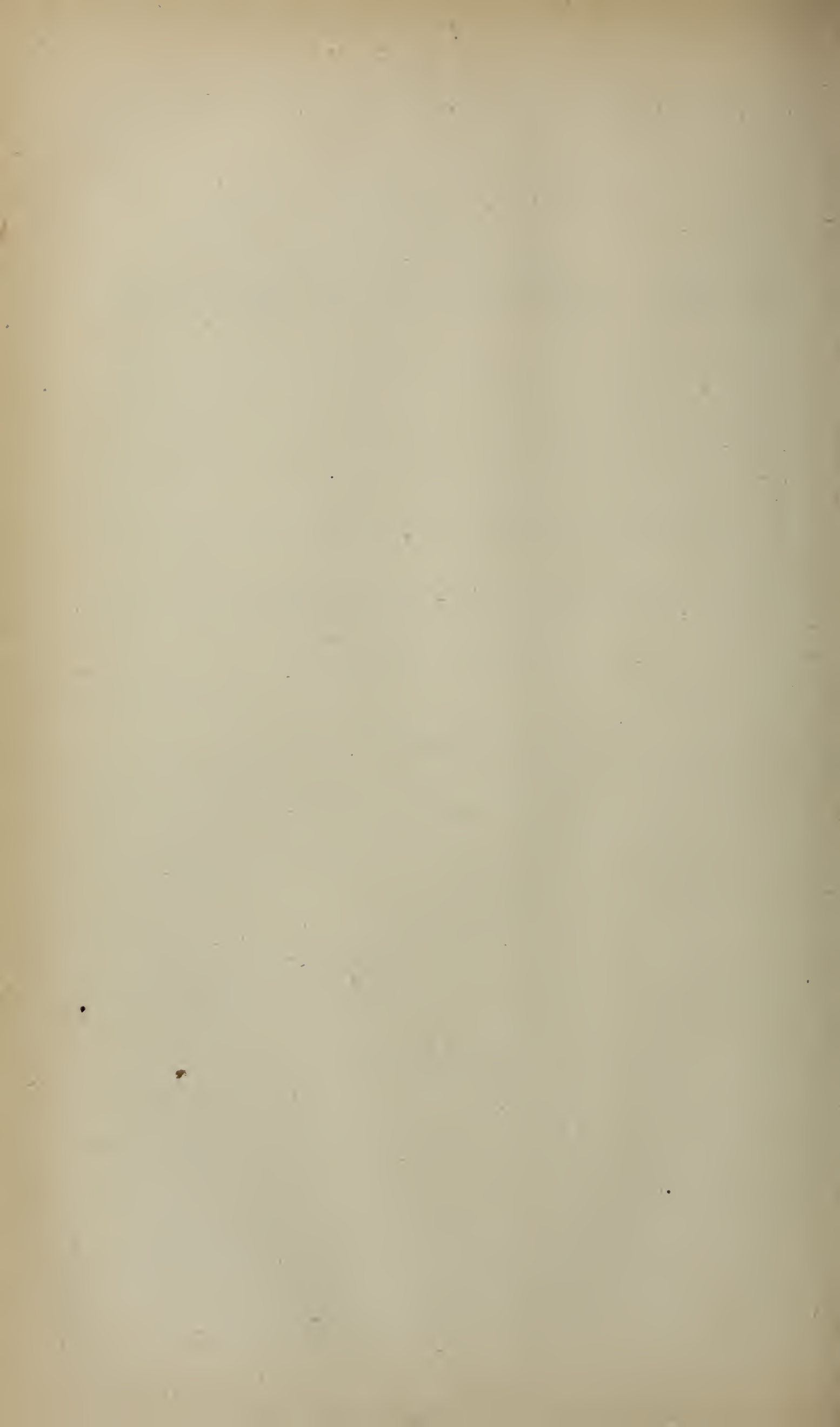
To the Hon. TITUS SHEARD, *Speaker of the Assembly* :

SIR—I have the honor to transmit herewith to the Legislature the forty-third annual report, for the year 1883, of the New York State Agricultural Society, with the accompanying abstracts and documents.

Very respectfully,

T. L. HARISON,

Corresponding Secretary.



REPORT OF THE EXECUTIVE COMMITTEE.

The season of 1883 was less favorable for farming in New York than any of those recently preceding. It was late in opening, cold and wet through the summer months, and the frost that occurred on the 4th and 5th of September was not only very early but unusual in severity. In the western counties the autumn also was rainy and cold, but in the eastern part of the State there was such a drought, beginning with the month of September, as to shorten pastures, and, in some districts, to dry up wells and streams. The result has been a very poor crop of wheat, a large growth of oats and barley, with more straw than grain in proportion, a very large crop of potatoes, somewhat affected in all parts of the State, and in some counties quite seriously diminished by rot, and the poorest yield of corn for many years, so many that few of the members of the society can remember so near an approach to a failure. The bean and buckwheat crops, the one of much importance in the western and the other in the eastern part of the State, are also partial failures. There is a moderate-sized crop of hops, a comparatively small portion of which is of prime quality, and an average yield of tobacco in the southern tier of counties, of fair quality when not injured by the September frost. The product of cheese and butter has been fully up to the average, but in the northern counties the fall-made butter has not been of the usual quality. Cheese has sold very well during the year. Butter has not brought as high prices as usual, and has not been so profitable as cheese, although at the close of the season really fine qualities, being unusually scarce, have brought high prices. Pastures, however, have been good, and the live stock of the farm has thrived accordingly, and the hay crop is one of the largest ever grown in the State, though not of the usual average quality. Considering also the very low prices prevailing for wheat, barley and potatoes, the year brings meagre returns to many farmers, the dairymen having the best and the grain growers the worst, the fruit-growers being also sufferers, through the failure of the apple crop, and the loss of the grapes by frost in the lake district.

One encouraging portion of the record of the season, however, is that better yields of clover seed are reported from several counties than, owing to the damage inflicted by the clover-seed midge and clover-root borer, have been obtained for several years.

Rather less wheat and rye have been sown this autumn than last

year, but it is generally reported that both have made good growth and are unusually promising.

The health of farm animals has been maintained, and no occurrence of Texas fever or of anthrax has been reported, while the area in which pleuro-pneumonia exists is not known to have been extended.

The society held its forty-third annual show at Rochester, September 10 to 14, at which there was brought out one of the largest and finest collections in all its departments, excepting that of flowers and fruits, that has ever been seen on such an occasion in this State. In the cattle classes the Jerseys were of the highest quality and in number nearly equal to the great entry of last year, and the show of Holsteins was the largest and best yet made by the society. Short-horns were good in number and in quality. There was as usual a large and beautiful display of Devons, but in Ayrshires, usually so full a class, there was a decided falling off. There was a very fine show of draught horses and an unusually attractive display of carriage and road horses in the classes of breeding stock, but in that of harness and saddle horses the entry was a small one. The other classes of live stock were well filled. In the implement department the exhibition was unusually large and interesting, and in that of farm produce it was very satisfactory.

The attendance at the fair was larger than usual on the first two days, but Thursday was a stormy day and the number of visitors was comparatively small, though large considering the weather. The receipts at the gates were \$13,249.16 as against \$14,826.82 in 1877, \$11,008.07 in 1874, and \$19,799.77 in 1868, being the three last previous fairs held at Rochester.

Twenty-nine analyses of fertilizers have been made by Mr. Habirshaw, for the society, during the year, being twelve less than in 1882. The results, however, are of some interest, and go to confirm the views expressed by the committee in last year's report. Of the twenty-nine samples analyzed, one was a low grade kainit, and one, reported to have been sold as dissolved bone black, proved to be composed of Charleston rock, acidulated, with which was mixed an iron and alumina phosphate of unknown agricultural value, the proportions being 22.33 per cent of the former and 37.35 per cent of the latter. Taking the remaining twenty-seven, which have been valued this year, for reasons of convenience and especially for the sake of having results that can easily be compared with those obtained by the State chemist of Massachusetts and the chemists of the Connecticut and New Jersey experiment stations, according to the schedule of trade values adopted by those chemists, it is found that with the six superphosphates proper the valuation exceeds the cost in every case but one, and in that one the cost exceeds the valuation by only fifty-five cents. Taking all together the valuations amount to \$226.61 and the cost to \$211.50, the valuation exceeding the cost 7.14 per cent.

In the next class of what may be called simple manures, we have three samples of ground fish-scrap, three of sulphate of ammonia, three of muriate of potash, one of ground bone (a very fair article

but sold at too high a price), one of Lobos guano, and one of nitrate of soda. Of these nine samples the aggregate cost was \$685.50, and the aggregate valuation \$759.12, the valuation exceeding the cost 10.74 per cent, although in the case of the ground bone and the Lobos guano the cost considerably exceeded the value, thus reducing the average result.

In the class of compounded manures, consisting of ammoniated superphosphates and other mixtures, the result is, as last year, less satisfactory. Of the nine samples the aggregate cost is \$374, and the aggregate valuation \$312.77, the cost exceeding the valuation 19.57 per cent

The schedule of values this year adopted is certainly a liberal one for the class of compounded manures as compared with simple ones, twenty-six cents per pound being assigned as the value of nitrogen in salts of ammonia, twenty-three cents in guanos and ammoniated superphosphates, and twenty cents in nitrates, and four and one-half cents being allowed for potash in low grade sulphates and muriates, while the allowance for soluble phosphoric acid has been reduced to eleven, and for reverted to eight cents per pound. In the three samples of sulphate of ammonia included in the second class of simple fertilizers above referred to, the average cost of nitrogen was 21.69 cents, and in the three samples of muriate of potash, the average cost of potash was 3.78 cents per pound."

The view expressed in last year's report is, therefore, confirmed, so far as so small a number of analyses can do it, and it may be further stated that Dr. Aitken, the chemist of the Highland and Agricultural Society of Scotland, in a valuable and important paper contained in the society's report for 1883, expresses the opinion that farmers "can effect a considerable saving by buying the materials they desire to have in their mixtures at the ordinary market prices, and mixing up the few tons they require at their own farms."

The executive committee record with profound and sincere regret the loss sustained by the society and the State in the death of George Geddes, ex-president of the society, which took place on the 8th of October. Mr. Geddes was born February 14, 1809, on the farm which his father had carved out of the wilderness, and on which he lived all his life. Connected with this society from its new beginning in 1841, he was one of its vice-presidents in 1848, and president in 1861. Few even of the earlier members have done so much to maintain its character and promote its usefulness. Ever ready with voice and pen, in counsel and in action, to advance the cause of agriculture, his teachings reached the public through many channels. His contributions to the transactions of this society comprise a report of experiments with Indian corn, 1844; report of his farm, for which the society's premium had been awarded, 1845; a paper on the construction and advantages of plankroads, 1846; the essay on rain, evaporation and filtration for which the gold medal of the society was awarded, 1854; and the survey of

the county of Onondaga, 1859. The services he rendered to the State, in numerous public employments and trusts, were also of the highest value. Of a singularly independent character, in which originality of thought was combined with patience in investigation, benevolence with firmness, decision with consideration for the opinions of others, he commanded the respect of all who knew him, and the strongest regard of those with whom he more intimately associated.

The committee record also, with sincere regret, the death of Mr. Henry E. Hooker of Rochester, who established one of the oldest and most extensive of the nurseries in the neighborhood of that city and was a frequent exhibitor of fruits at the shows of this society, as well as one of the founders of the Western New York Horticultural Society; and the loss sustained by the same societies, and by horticultural science, in the early death of Mr. Henry B. Ellwanger of the same city.

TREASURER'S REPORT.

RECEIPTS.

Balance from account of 1882, including value of medals.....	\$5,458 01
Received from State Treasurer, on account 1882	5,280 65
Tickets sold at Rochester fair	13,249 16
Refreshment privileges.....	1,500 00
Catalogues	97 00
Transportation and forage account	254 00
Annual memberships.....	613 50
Life memberships	100 00
Cash from State Treasurer, on account 1883.....	4,706 25
	<hr/>
	\$31,258 57
	<hr/>

DISBURSEMENTS.

Expenses of annual meeting	\$32 28
Premiums and expenses of previous years.....	318 65
Salaries and traveling expenses	4,495 96
Incidental expenses of office	76 55
Postage account.....	35 00
Library and museum.....	118 25
Printing and stationery.....	316 66
Maintenance of Elmira fair ground	452 38
Expenses of Rochester fair	11,693 82
Premiums and premium expenses.....	9,690 29
Medals on hand	150 31
Balance to new account.....	3,878 42
	<hr/>
	\$31,258 57
	<hr/>

ADDRESS

DELIVERED AT THE ANNUAL MEETING, JANUARY
16, 1884.

By GEORGE F. MILLS, President.

Gentlemen of the New York State Agricultural Society :

The time has arrived for me to vacate the position you so kindly placed me in one year ago. It gives me great pleasure, and I am sure it must be very gratifying to you all, to know that the last annual cattle show and fair of the society, held at the city of Rochester, was pronounced a success. The exhibition as a whole has never been surpassed in the history of the society. Among the gratifying features of the fair was its freedom from rowdyism and dissipation, the exclusion of all inducements for the attendance of that element of society from which disorders arise. In the distribution of premiums care was exercised, and general satisfaction was given. A revision of the premium-list is made every year, and it would greatly aid the managers if members and exhibitors would suggest such changes as seem to them desirable, in the departments to which their own attention has been especially directed.

The evening meetings were of unusual interest. The papers read on these occasions were instructive and merited larger audiences than were present. I would suggest that these lectures be given hereafter at some hour during the day, and in some hall, or tent, on the grounds, so as to give a larger number of farmers an opportunity of listening to and profiting by them.

The year just closed has been one of marked peculiarities. While the farmer, in the western part of our State, secured his crops with difficulty, owing to frequent rains, the crops in the eastern part were suffering for want of moisture. While acknowledging the elements to have been somewhat against us, grain crops were of a fair average yield, with the exception of wheat in the western part of the State. The early frost shortened the corn crop in most portions of the State, but it is claimed that the extra heavy oat crop will make up for the shortage of corn. The yield of potatoes was unprecedented, and it may not be amiss to mention here that the State of New York produces one-fifth of all the potatoes grown in the Union.

My attention has during the past year been somewhat directed to statistics, and I find from the report for 1882, made by the Department of Agriculture, that besides our great proportion of the potato

crop, we raise one-third of all the buckwheat, one-fifth of the barley and one-fifth of the hay that is grown in the Union. We lay no claim to importance in wheat and corn, but the same report states that our yield of wheat was 12,000,000 bushels; of corn 20,000,000, and of oats 40,000,000. With these apparently stupendous figures we need not feel alarmed lest we are over-producing, for we are assured of markets at home, as well as abroad, at prices that will compensate the farmer for his labor.

A few years ago many people were of opinion that the soil of the State of New York was becoming exhausted, but the reports made to the Agricultural Department show that our land is producing more every year. Improved methods and improved seeds, together with a knowledge of the wants of our soil, bring about the desired results. We have learned also by experience that varied husbandry is, in our State, the secret of our uniform success.

The annual value of farm products of our own State is about \$200,000,000. The annual report of the chief of the U. S. bureau of statistics shows that the total value of the exports for the fiscal year, ending June 30, 1883, was larger than in any previous year of our history, having reached the imposing amount of one billion and a half, and being in excess of the imports for the same period by the sum of \$117,326,909. The exportation of our products has begun within the memory of some who are with us to-night. I, for one, am proud to be able to speak of the marvelous rapidity of the advancement of American agriculture.

Looking at the facts just quoted, regarding our exports and the great productiveness of our country, the question arises — what is to become of it all? Some may ask — Is there not more food material than the world needs? By way of answer to these serious questions, I will read what a famous English statistician has recently written concerning the future of the human race. It is a dismal picture, but one not likely to be realized in our day. He says: "Population is increasing so rapidly that consumption will soon overtake production and great suffering will result. In former times war, pestilence and famine put a check to the increase of population and permitted the raising of sufficient food to supply those who survived these calamities. Twelve millions of the people of Great Britain are absolutely dependent upon food grown in other parts of the world; there would be starvation in Germany were it not for the large emigration. France alone has discovered the secret of limiting her population, but it is at the expense of the morals of large sections of the community. The troubles in Russia are due, in great part, to the taking up of all arable land in that country, for the population has increased prodigiously during the last half century. But in no country is there such a multiplication of human beings as in the United States. If we increase in the future as we have in the past we shall have a hundred million people early in the twentieth century, two hundred millions by 1925, and eight hundred millions by 1975. The country will then be more densely populated

than China is, and the standard of comfort will be lowered as the price of land goes up, while the working classes will be subjected to the most distressing privations. In India to-day the increase of inhabitants is so rapid that the government is appalled and does not know what to do. It is trying to increase the amount of arable land by great irrigating works, yet the population increases at the rate of one million per annum, and the multiplication of human beings is more rapid than the additions to food production."

I would like to say some words of encouragement to our young men brought upon farm. There is a tendency now-a-days for farmers' sons to dislike the occupation of their fathers. It is a mistaken idea of theirs to leave the farm to go to a crowded city, with the expectation of making a fortune in an easier employment. Not one young man in five hundred succeeds. It is not my province to tell others what they shall do, but I would say to those contemplating tilling the soil as their occupation, that while farming is laborious, requiring skill, experience and untiring energy and industry, yet, all acknowledge that a farmer's life is an independent life. Science and the knowledge that comes from experience have helped to place agriculture in its present prosperous condition. Tilling the soil, like all other sciences, is capable of indefinite improvement, and those engaged in it should not be content with what has been gained at any former period, but should reach after new acquisitions, and devise and test new methods, instead of being satisfied always to follow in the ways of others. Defeat sometimes helps progress.

Young men should understand that success depends, in great measure, upon promptness and skill to seize opportunities, and take advantage of the rise of the tide. I would urge upon the man who is starting out in life with the intention of becoming a farmer, to thoroughly study the quality of the soil and what it is best adapted to, remembering that prices are always governed by the law of supply and demand. Locality is to be studied, for while a certain crop may be highly remunerative to the farmer in Queens county it will prove a loss to the farmer in St. Lawrence.

The subject of maintaining the fertility of the soil is brought prominently to the minds of farmers through the agricultural papers, and there is no doubt that the advertising, and making people acquainted with the facility of obtaining and using commercial fertilizers has been of service in suggesting the means of bringing up worn-out land. Where crops have largely increased you will find that farmers are using fertilizers extensively. We have reason also to believe that the analyses of commercial fertilizers by our chemist, Mr. Habirshaw, and by other chemists, and the publication of them in the various State and station reports, have done great good.

You will all agree with me that it was wise for our State to establish an experiment station. Those of you who examined the exhibition at the Rochester fair from the station farm must have been more than ever convinced of the benefits to be derived from that source. The first annual report of the board of control, made March

6, 1883, contains a full account of the operations of the first year. That report should be in the hands of every person in our State who is interested in farming. It speaks wonders also in praise of the management of the institution. The experiment station is, without doubt, a thoroughly practical feature of progressive agriculture, and its usefulness is proving its right to existence and support.

The breeding interest in the State has during the past year continued to develop, and New York not only maintains herself, but advances in this most useful and profitable agricultural pursuit. We have in our State an increasing number of intelligent men who have entered upon a systematic course in the breeding of horses. Some are making a specialty of the carriage and road horse, others of the heavy animals for agricultural and draught purposes. All who witnessed the fine display of the several breeds at our late fair must be convinced that they are making a great success in this department. The improvement of stock is a subject of vast importance to the farmer, and he should well inform himself, so as to select the breed best adapted to his locality and purpose. Within the limits of our State we have herds of thoroughbred neat stock, of undoubted purity of blood, and great excellence of quality, and their skillful and careful breeding has attracted the attention of admirers of thoroughbred cattle throughout the country. The many fine specimens on exhibition at Rochester were conclusive evidence that the State of New York may again become the acknowledged leader in the rearing of improved breeds of cattle.

The wonderfully fine display of agricultural implements at the late fair has never been equaled. The mechanics of our State have good reason to be proud of their inventive genius and skillful use of material. As I looked over the acres of useful machines I was more than ever impressed with the thought that art and science help no pursuit more than that of the farmer.

Since our last gathering here a valued friend has been removed by the hand of death. No one had the interest of the society more truly at heart than the late Mr. George Geddes, and no one had done more for its advancement and success. His memory will be gratefully cherished by all its members.

To the gentlemen of the executive board, the general manager and general superintendent, I desire to express my sincere thanks for their kind support, and especially do I desire to return thanks to our worthy and efficient secretary, who has at all times been ready to make my duties easy and pleasant.

My last official duty that remains to be performed is a very agreeable one — I have the pleasure of introducing to you, as my successor, one who is well known to be a true friend of the society, one in every way qualified to direct it successfully — Mr. William M. White, of Livingston.

THE DAIRY INTERESTS OF THE STATE OF NEW YORK.

PAPER READ BEFORE THE SOCIETY, JANUARY
16, 1884.

By JOSIAH SHULL.

There is no State in the United States in which the dairy forms so large a part of its agricultural value as in the State of New York. In comparing the dairy with the other agricultural industries, there is none which compares with it either in the magnitude of its investments or in the importance of its productions. It is the leading interest in the farming of the State.

In presenting this subject it becomes necessary to appeal to the last enumeration of the census, that we may bring the comparison down to the last reliable date.

The amount and value of the dairy products in the United States, as by the census returns, we find reported in the year 1879, — pounds of butter, 806,672,071 ; pounds of cheese, 243,157,850. Estimating the butter at twenty-five cents a pound, and the cheese at eleven cents a pound, we find the value of butter, \$201,668,018 ; value of cheese, \$26,747,363. We here find the value of the butter and cheese in the United States \$228,415,381.

In the enumeration the number of pounds of butter and cheese manufactured in the State of New York in 1879 was, pounds of butter, 120,878,201 ; pounds of cheese, 129,163,714. Estimating the butter, as before, at twenty-five cents a pound and the cheese at eleven cents a pound, we find the value of butter \$30,219,550 ; value of cheese \$14,208,008, making the total value of butter and cheese in the State, in that year, \$44,427,558. It will here be seen that the State of New York made nearly one-fifth of all the butter and cheese produced in the United States. The estimated value of all farm products of the United States was \$2,213,402,564, and New York's share was \$178,025,695. This is about one-twelfth of the value of all farm products of the country. The amount of cheese was in the United States 243,157,850 pounds ; New York's share was 129,163,714 pounds. From this it will be seen that the State of New York made more than one-half of all the cheese made in the country. The value of all farm products of the State was

\$178,025,695. From these data we find the value of the butter and cheese to be nearly one-fourth of all the agricultural products of the State.

The number of cows in the State at the time of the last enumeration was 1,437,851. Since that time the dairy business has rapidly increased, so that, at the lowest estimate, the number of cows at this date is 1,500,000. Increase the value of the butter and cheese with the increased number of cows, and we get the value of the butter and cheese for the year 1883, \$46,347,815.

The quantity of milk consumed on the farm, in the villages and cities is about 45,000,000 gallons, or 156,521,740 quarts. At two and one-half cents a quart it will amount to \$3,913,043, which, added to the \$46,347,815, makes the aggregate value of the milk product of the State, \$50,260,858.

It is ascertained that the quantity of milk and cream received in the cities of New York and Brooklyn, in the year 1883, was 133,350,000 quarts. At two and one-half cents a quart this amounts to \$3,333,750, or nearly seven-eighths of all the milk consumed in the State. This would indicate that the quantity of milk consumed in families, on the farms, in villages and in cities has been under-estimated. I think we can safely say that the quantity of milk consumed outside of the cities of New York and Brooklyn is at least twice the quantity consumed in these two cities. Presuming that there is twice as much milk consumed outside of these two cities as there is in them (133,350,000 quarts), then we have 400,050,000 quarts consumed in the State and a value of \$10,001,250; which added to the value of the butter and cheese, \$46,347,815, we have as the aggregate value of the milk product of the State, \$56,349,065. I think we can justly concede the latter estimate the nearer correct.

The quantity of land required to support the cows comprises about one-fourth of all the improved lands of the State. From these data we find that three acres of land is required for the support of one cow, one year. At this rate the 1,500,000 of cows now kept in the State require 4,500,000 acres of land for their support, which is a small fraction more than one-fourth of all the improved lands of the State.

The total quantity of improved land in the State is 17,717,802 acres; and the total value of farms is \$1,056,176,741, this is at the rate of \$59.61 per acre. We here find we have invested in land employed for the dairy 4,500,000 acres at \$59.61 per acre, making the total value of land employed \$268,245,000.

Taking the number of cows, 1,500,000, and estimating them at \$33.50 each, and we have the value of cows, \$50,250,000.

We find the value of farm implements and machinery in the State reported at \$42,592,741. Having ascertained that one-fourth of the improved land in the State is employed in the dairy, we find the value of the implements and machinery thus employed to be \$10,648,185.

In summarizing, we find employed in the dairy in the State quantities and values as follows:

Land, in acres, 4,500,000 ; land value, \$268,245,000 ; number of cows, 1,500,000 ; cows' value, \$50,250,000 ; implements and machinery, \$42,502,741 — one-fourth, \$10,648,185, making the total value employed in the dairy, \$329,143,185.

From these computations it will be seen that the value of cows is fixed at \$33.50 each. And the value of the product is a fraction of a cent more than \$33.50 for each cow for one year.

These figures and estimates include all qualities of land, from the very lowest-priced to the highest-priced in the State. Also include all the features in the management of lands and the dairy. They include farmers who make failures in their business, and those who make a success in their business. We, therefore, here have shown the business, as embraced in all of its varied features.

The prices of the several dairy products of this State have been so stable and uniform for the last four years, that our estimates and calculations present a very correct and reliable statement of the business at this date (1884).

The value of dairy products as a means of human sustenance will continue to be one of the great factors in sustaining human life. Milk from healthy animals, being the only perfect human food, must grow in use as the value of good health is appreciated, and economy in living is studied and practiced. While we raise no food as cheap and valuable as milk, we find none equal to it in perfection of its nutrition. Therefore, the reasons are obvious why the dairy engrosses so large a share of the agriculture of our State, and will continue to increase in value and importance as its qualities are better understood and its products improved.

The business of dairying is a great and complex art, which calls for the most extensive knowledge to prosecute it successfully, and make the products the most available. It has been carried on by traditional rules, gradually adding item to item in the improvement of the products. We feel constrained to note the fact that within the period of twenty years, since the organization of dairymen's associations and the publication of their discussions, more progress has been made in dairy knowledge and science than for all previous time in the history of the world. While the use and value of milk as a food was duly recognized, its proper manipulation to make it of commercial value was but imperfectly known, and was of but very insignificant value compared with other agricultural pursuits. Though the improvements have been slow, yet they have been of a character to add materially to the prosperity of the dairy farmer of the State.

With our lack of knowledge of the natural laws and influences which control the secretion of milk, the breeding and selection of dairy stock, with the view to carry along and preserve the improvements made, calls for the aid of the best science and practical knowledge attainable.

I have thought best not to enter into a detailed presentation of

statistics of the dairy interests, but simply present the matter by the use of as few statistics as possible, yet sufficient to show the extent and value of the interest, relatively with the other agricultural interests of the State. To load down with a large array of tabulated statistics would render the subject tedious and less comprehensive. For general details, reference may be had to the detailed reports of the census department.

THE WHITE GRUB OF THE MAY BEETLE, LACHNOSTERNA FUSCA.

READ BEFORE THE N. Y. STATE AGRICULTURAL SOCIETY AT THE
ANNUAL MEETING, JANUARY 16, 1884.

By J. A. LINTNER.

In former addresses which I have had the honor of delivering to this society, it has been a great gratification to me that I have been able to tell of the progress made in economic entomology — that science that, through the study of insect lives and insect habits, aims to promote the comfort, welfare, happiness and prosperity of society at large. So marked has been this progress, that I need not at this time dwell upon it, for it must be evident to all who have given the slightest attention to the study. Insect depredations, to an extent elsewhere unknown, imperatively demanded that means should be found for their control. In recognition of the need, and in response to the call, provision, through State aid of the means essential to the study, was made, and those were found who were ready to devote themselves enthusiastically to the work. As the result, we are able to say, that there is to-day, within the reach of our agricultural community, a literature which offers them means for protection from their insect foes, superior to that in any other country of the globe. But while boasting of this progress, I should fail of giving honor to whom honor is due, if, while standing here, I did not give you the opportunity of joining with me in the boast, by reminding you that at the very basis of this progress lie the labors of Dr. Asa Fitch, called to his work thirty years ago by your society, and sustained therein for nearly a score of years, through appropriations obtained from the State, through the instrumentality of your society. True, the labors and writings of Dr. Harris, of Massachusetts, in his studies of insect habits and of preventive and remedial measures against a few species, initiated economic investigations, and prepared the way for more extended research; yet comparatively little could be accomplished in so vast a field, until specialists could be summoned to the work, prepared to devote to it their entire time and their best abilities.

But the progress of which we boast is only great by comparison with the ignorance that formerly prevailed when directions were given in our agricultural journals “how to destroy the cut-worm,”*

* In the genera of *Agrotis*, *Mamestra*, *Hadena*, and a few others closely allied, over four hundred United States species of moths have been described, the larvæ of most of which, if not all, may be classed as *cut-worms*.

and "how to prevent caterpillar attack." When measured, however, with what remains to be accomplished, the work seems but barely to have been entered upon — so immense is the number of species to be studied, so varied are their habits, and so secretly are many of the depredations conducted. While the last decade has contributed to our literature the life-history of a large number of destructive species, and has enabled us to find their most vulnerable point of attack and the most effectual means of destruction, there still remain several of our more injurious pests, which, as yet, we know not how to control, or how to prevent, at times, their wresting from us the products of our toil or the objects of our pride.

We need not be ashamed to make this confession. It in no degree invalidates the importance of entomological investigations. It is simply a consequence of the partial investigations thus far made — commenced only by those who have but recently passed off the stage, and continued by a paltry number of successors, for, as I have elsewhere stated, there are not within the three millions of square miles comprising these United States, more than ten persons who are permitted to devote their entire time to the furtherance of economic entomology. If, by a wise prevision, this number could be quintupled, through each one of the several States contributing its quota, what rapid progress might be made through such an increased and diffused co-operation. My experience of thirty years in the study of insects enables me to make the assertion, that *there is not a single insect pest, the depredations of which we cannot materially control, whenever its entire life-history becomes known to us.*

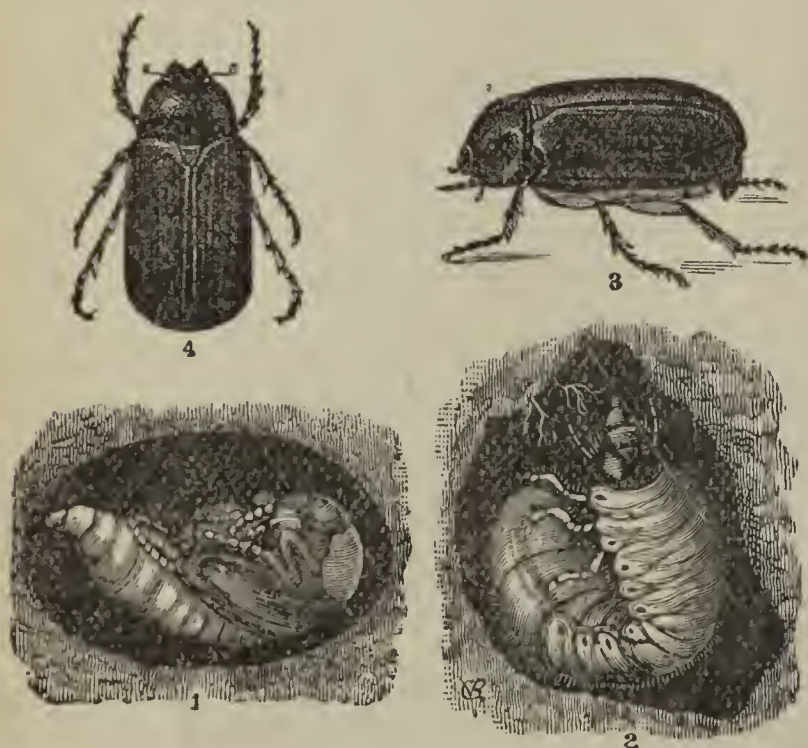
The exposed habits of the larvæ of most of our Lepidoptera (butterflies and moths), they being external feeders by day upon various plants, shrubs and trees, have made them comparatively easy subjects for study. It is different when we have to deal with Coleoptera (beetles) where the larval or grub stage is generally concealed. This is why the early stages of so few of our Coleoptera have as yet been discovered and described.

When, in addition to a hidden, subterranean, larval life, we have also in the life-history the perplexing element of a greatly prolonged and unknown larval stage, the problem of how best to deal with our insect foes becomes a difficult one. In the Coleoptera, among the *Elateridæ* and the *Scarabeidæ*, we have two groups which unfortunately are in this category. The life-histories of the *wire-worms* and of the *white grubs* are unknown to us, and even the duration of their larval period has not been definitely ascertained. They are among the more serious pests of the agriculturist, and we do not know how effectually to prevent their depredations. Many experiments have been tried to control them, some of which have been partially successful. Not awaiting more positive and perfectly satisfactory results, I deem it proper that there should be furnished the public from time to time such an epitome of what has been ascertained as may permit of its beneficial use.

I have, therefore, chosen for my topic this evening the May-beetle, *Lachnosterna fusca* (Frohl.), and desire to tell you what is known of it.

The larva of this species has, by common usage, received the name of "the white grub." It is not a well-chosen name since there are several allied forms to which it might be quite as well applied, but it serves, from its general adoption, the purpose of separating it from others when we would speak of it. The perfect insect has in like manner been named the May-bug or May-beetle, and the June-bug or June-beetle. As it is a frequent visitor in our houses where it is attracted to light, many of you have doubtless made its acquaintance in your childhood. It is a thick-bodied insect of an oval form, and of a dark brown color, and measures about eight-tenths of an inch in length. Its wing-covers are shining and smooth,

and numerous minute impressed dots. The short antennæ terminate in three yellow leaflets or plates. The breast is covered with fine, glossy, yellowish hairs, from which it (together with the other species of the genus) owes the generic name of *lachnosterna*, signifying *wooly-breasted*. The legs are tawny yellow, with black upon the joints. In the accompanying figure it is shown in a side and back view in 3 and 4.



THE WHITE GRUB.

The larva may be characterized as a large white, soft grub, with some scattered fine hairs, a flattened, brownish or light mahogany colored head, with six distinct, rather long legs on the front part of the body (the first three rings), and the hinder portion of the body considerably the thickest, as shown in the accompanying figure. When thrown from the ground, it usually assumes a curved form, its head and terminal end nearly meeting. When full-grown it is almost the size of a man's little finger. In the preceding figure, at 2, it is represented as lying within a cavity made by it in the ground, while feeding upon the roots of its food-plants.



There are several other "white grubs," similar to this in general appearance, but as they have habits in common, to a great extent, it is not necessary, except where observations are desired for scientific uses, that they should be readily separable. From a very similar species, however, which occurs in manure, it is important that it may be distinguished, lest proper manuring should be with-

held, through fear that the May-bug would be conveyed with it. The May-bug grub does not occur in manure, as its food consists of living vegetable matter. The grub which is frequently found abundantly in dung-hills, and may be met with under the droppings of cows in fields, is exclusively a dung feeder. It is known in some localities as the "muck-worm." Its scientific designation is *Ligyrum relictus* Say. The following features, by which the two may be separated, have been pointed out by Mr. Walsh. In the latter species, there may be seen on its back through its semi-transparent skin, along the entire length of the body, a lead-colored line, denoting its intestinal canal filled with the black dung upon which it has fed. In the true white grub, the *L. fusca* larva, it is only near the terminal end of the body that it shows a lead-colored appearance, because it is only at this portion of the canal that the roots upon which it feeds have become digested and converted into a dark-colored excrement (*Practical Entomologist*, i, 1866, p. 60).

THE EGG.

"The eggs are white, translucent, spherical, with an average diameter of 0.09 inch. They are deposited between the roots of grass, and are inclosed in a ball of earth before deposition, as the cavity is sufficiently large for the egg to roll about in." (Riley, Fifth Report, 1873, p. 55.)

It would appear that the above is given from the personal observation of Prof. Riley, or upon reliable information communicated to him. If this be so, then the following statement communicated to the *Country Gentleman*, of August 27, 1874 (p. 547, c. 4), cannot be accepted: "Two years ago, I repeatedly saw in a garden the female depositing eggs while flying — just at dusk — an inch or so above the ground. These eggs were polished white, as large as pigeon-shot, and dropped singly. This is in contradiction to the 'authorities,' for it is stated that the female digs again into the ground and deposits about thirty eggs in one hole" (T. J. Burrill, Champaign, Ill., professor of botany, in the Illinois Industrial University).

Beyond the above, I have no knowledge of any publication of observations upon the egg-laying of this species, the construction of the ball of earth in which the eggs are said to be first inclosed, or the manner of its burial. How the ball making and its burial to a considerable depth in sod can be accomplished by the aid of feet so seemingly unfitted for such operations is incomprehensible to me.

INJURIOUS CHARACTER OF THE INSECT.

The May-beetle may with propriety be named among our most injurious pests. It has attained the unenviable notoriety of being pronounced "one of the very worst and most insidious of the farmer's foes." If a list of our insect enemies were arranged in the order of relative importance, this species would, I think, find place among the first twenty. It is a native species, and very early notices appear of its serious injuries. It was first described nearly one

hundred years ago — in 1792. Unfortunately, its depredations are evidently upon the increase, particularly within our own State, as appears from the following extract, and from the many inquiries received by me, of late, for approved and effectual means for the arrest of its ravages.

From Washington county, N. Y., in 1881, we have this statement: "The widespread havoc which this insect has caused this year, and the fact that its ravages are increasing with alarming rapidity, is my excuse for referring to the subject. The damages in this county amount to, probably, thousands of dollars annually, and are increasing."

The extent that these depredations have already attained is a sufficient warrant for this present study of them, and for their presentation to your society at this time.

In their consideration, those committed in the early stage of the insect — that of the grub — will first be referred to.

INJURIES FROM THE GRUB.

Dr. Harris writes: "They subsist on the tender roots of various plants, committing ravages among these vegetable substances, on some occasions of the most deplorable kind, so as totally to disappoint the well-founded hopes of the husbandman."

To Grass. — Dr. Fitch thus notices it: "These grubs feed upon the roots of grass and other plants, which they cut off a short distance beneath the surface; and when they are numerous they advance under ground like an army, severing the turf as smoothly as though it were cut with a spade, so that it can be raised up in large sheets, and folded over or rolled together like a carpet. Often from a dozen to twenty grubs will be exposed in every square foot when the turf is thus raised. Large patches of this kind will occur in the middle of a meadow or pasture, every blade of the grass being brown and dead" (3d, 4th and 5th Repts., 1859, p. 53).

In some pasture-lands near London, Ontario, throughout entire fields "the roots of the grass had been so eaten that the turf could readily be lifted by the hand by the yard, and underneath were thousands of the grubs feeding on the remaining fragments of the roots. In one instance, a field had been so completely destroyed that the farmer had set fire to the withered grass, with the hope of scorching the enemy to death (*Canadian Entomologist*, xiii, 1881, p. 200).

To Corn. — The accounts given of its destructiveness to corn are numerous. Not only does it cut off the young corn when a few inches high, but it will also destroy full-grown corn over entire fields. On Prairie Ronde, in Michigan, it appeared in such numbers as nearly to destroy many fields of corn. Upon examination of a few corn stalks left standing in a field, the roots were found eaten off to within a few inches of the stalk, and often from three to five large grubs in a hill. Most of the corn was killed early in the season, and the few stalks left were dying a lingering death without producing any grain (*Practical Entomologist*, i, p. 60).

A gentleman from Nine Mile Prairie, Missouri, writes: "They are destroying whole fields of corn. I have seen fields where they have destroyed the corn in patches for rods around, leaving the ground as bare as the traveled road. They seem to destroy the tap-root first, and afterward prey on the laterals" (*Practical Entomologist*, i, p. 61).

From Washington county, N. Y., we have this statement and estimate of injuries to corn from the grub, in the year 1881: "A large area of corn, in the aggregate, has been badly injured or entirely destroyed. On my own farm they caused the loss of one hundred bushels of corn alone; much of it would pull up by the roots when struck by the knife, frequently exposing to view from five to fifteen grubs" (*Country Gentleman for Dec. 29, 1881*, p. 851, c. 3).

Mr. Glover records their extraordinary abundance in Grayson county, Virginia, in 1874, where as many as one hundred and ten were counted in a single hill. They were also, during the same year, quite destructive to corn crops in Huntington county, Indiana, and in Montgomery county, Missouri (*Report of the Commissioner of Agriculture, for 1874*, p. 129).

To Strawberries.—It has long been known as especially addicted to feeding upon the roots of the strawberry. Prof. Forbes, in his excellent *Address on Insects Affecting the Strawberry*, read before the Mississippi Valley Horticultural Society, at New Orleans, on February 22, 1883, represents it (page 27 of Author's Separate) as "perhaps the most unsatisfactory insect with which the strawberry-grower has to deal, offering the fewest opportunities for effective attack. The roots of the plant are often destroyed by it to a degree to impair seriously the value of the plantation." Mr. B. D. Walsh has written of it that it "is particularly destructive to strawberry beds and is probably one of the chief reasons why this plant will not last more than a few years on the same spot of ground in this country" (*Pract. Ent.*, iii, p. 60). Dr. Packard records its ravages at Salem, Mass., where many plants were killed by its eating the main roots and thus passing from one plant to another (*3rd Report Inj. Ins. Mass.*, 1873, p. 6).

To Potatoes.—In Washington county, N. Y., during the year 1881, the grub is charged with having devoured whole fields of potatoes.

INJURIES OF THE BEETLE.

Many of our insect pests are injurious only in their larval stage, except through the evil that they originate in the deposit of their eggs. Of this class are all of the extensive order of Lepidoptera, embracing the butterflies and moths, which, in their winged stage, are unprovided with jaws for biting. Their slender and flexible tubular proboscis, fitted only for imbibing liquids, cannot be used for any

serious harm — in this particular, unlike the rigid, stouter proboscis of the Hemiptera or bugs, which is capable of inflicting serious and varied injuries. The powerful jaws with which many of the Coleoptera or beetles are armed, are often fitted for, and employed as, formidable instruments of offense. The May-beetle, while, from the character of its food and a life-period of short duration, it is less injurious than its insatiate and long-lived grub, is still chargeable, as a leaf-eater, with extensive depredations at times upon many of our fruit, forest and shade trees. Dr. Fitch has written of them as “gathering by night upon the trees and eating the leaves, sometimes in such numbers as to wholly strip the foliage from the choice varieties.” Prof. Riley states: “I have known the Lombardy poplar to die, in consequence of the utter denudation they caused; while groves of both pin and post oaks [*Quercus palustris* and *Q. obtusiloba*] * * * were thoroughly and suddenly denuded by them” (*First Report Ins. Mo.*, p. 157).

Of the fruit trees, the cherry and plum appear to be preferred. It was thought by Mr. Walsh that their swarming upon these trees, as they occasionally do, was not usual, except in the eastern States, as he had not known it to occur in the valley of the Mississippi (*Practical Entomologist*, i, 1866, p. 62). But that they are, at times, quite as abundant in that region appears from the record, that in Cameron, Missouri, “they swarmed during the last of May, 1866, making a noise on the trees like the coming up of a storm of wind and rain” (*American Entomologist*, i, 1868, p. 37.) Among other trees, the beetle is recorded as feeding upon the oak, the maple and the beech.

LIFE-HISTORY.

When I say that the life-history of this insect is not known, I offer the best reason for our inability to give effectual means for preventing the heavy annual losses that it inflicts upon us. The brief outlines of a history that are to be found in our entomological reports appear to have no better foundation than a presumed agreement with that of the European cockchafer, *Melolontha vulgaris* — a very poor basis, it may be remarked, for, long as that notorious pest has been known and studied, the knowledge of its transformations is far from complete. Dr. Harris gives no details, but contents himself with the very broad statement that “the habits and transformations of the common cockchafer of Europe * * * will serve to exemplify those of the other insects of this family.” Even so accurate an observer as Dr. Fitch, thoughtlessly and unwisely we think, committed himself to the following statement: “Every thing known respecting the history of our May-beetle and its transformations concurs to show that it is exactly analogous to the cockchafer or May-bug of Europe.” In truth, the European cockchafer, of whose excessive abundance and ravages at times we have had such graphic accounts, is not closely allied to our May-bug. It belongs to another genus — *Melolontha* — which is entirely unrepresented in this country.

Prof. Riley presents the following history, unaccompanied with

the authority or observations supporting it: "Soon after pairing, the female beetle creeps into the earth, especially wherever the soil is loose and rough, and after depositing her eggs, to the number of forty or fifty — dies. These hatch in the course of a month, and, the grubs growing slowly do not attain full size until the early spring of the third year, when they construct an ovoid chamber, lined with a gelatinous fluid; change into pupa, [shown in the accompanying figure] and soon after into beetles. These last are at first white, and all the parts soft as in the pupa, and they frequently remain in the earth for weeks at a time until thoroughly hardened, and then, on some favorable night in May, they rise in swarms and fill the air. It is very probable that under favorable conditions, some of the grubs become pupæ, and even beetles, the fall subsequent to their second spring; but growing torpid on approach of winter, remain in this state in the earth, and do not quit it any sooner than those transformed in the spring. On this hypothesis, their being occasionally turned up in the fresh beetle state at fall ploughing becomes intelligible" (*First Report Ins. Mo.*, p. 157).



In all thus far written of the transformations of this insect, the element of uncertainty largely prevails. It does not appear that the larval life-duration has in one instance been ascertained, and many such determinations would be required in order to establish a rule of uniformity or the range of variation. Observations, sufficiently reliable, to contribute toward building up a life-history are almost wholly wanting. The following are of some value:

In Clinton county, Missouri, the beetles swarmed late in May of 1866, from which eggs were doubtless deposited in June (the female *is said* to live for about a week). The grubs [from these eggs] were small and not very injurious in 1867. They were "full-grown, fine fat fellows" in the autumn of 1868 (*American Entomologist*, i, 1868, p. 37). From the above we educe: If the larva then were as reported, full-grown, the beetles from them would appear in May of 1869, three years from their preceding appearance. The grubs may have either transformed into pupa in the autumn of 1868 or spring of 1869 — in the third year of their life. Their larval period would then have been either two and one-third or two and three-fourths years.

Dr. Packard records his having found the pupæ "in little rude cells or chambers about six inches under the mould * * * in Maine, late in May" (*3rd Report Ins. Mass.*, 1873, p. 7).

I will here quote from its obscure resting place, where it seems to have been overlooked, a somewhat circumstantial history of the transformations of this insect, which from the absence of technicalities and its general character, would seem to be the personal observations of the writer, and, therefore, of considerable value. It is from the *Patent Office Report* for the year 1852, Pt. ii, *Agriculture* (p. 219), and is a portion of a report upon the crops of Ulster county, N. Y., made by David L. Bernard, of Clintondale.

Corn. — This crop is extensively cultivated in this county, and is considered the most remunerative at present. It seldom fails with us to produce a fair yield, except in seasons when the *larvæ* of a beetle are present with us. When these *grubs* prevail to a considerable extent, neither good husbandry nor high manuring can secure us a crop ; and perhaps no other county has for the past twenty years suffered more loss from this, than Ulster. This formidable enemy to agriculture seems gradually to be leaving us, in all probability to appear in some other place, and there to renew the same destructive process practiced on us. In order to give this *beetle* a slight introduction to whom it may concern, I will give a brief description of its general appearance and habits. The bug or beetle is about three-fourths of an inch in length, of a dark brown color, and may be seen in large numbers flying through the air, in the early part of the evening, about the last of April or first of May. They deposit their eggs generally in the month of June, on grass land, on soil that is light or loamy. The larva is hatched from the egg during the month of August, and feeds upon the roots of vegetables until the ground becomes frozen ; it then descends below the frost, and there remains in a state of torpidity until the following spring. As the frost leaves the ground it ascends to the surface (exhibiting no increase of growth during the winter), and again resumes its former mode of living, carefully secluded from the rays of the sun ; feeding on the roots of almost all kinds of grasses and vegetables. Its movements are slow and sluggish ; its color nearly white, with the exception of the head, which is red ; it has six legs, three on each side ; it is at this age about one inch in length. It continues its destruction of all green vegetable matter with which it may come in contact, until the ground becomes frozen again. This is its most destructive season through its progress of change. As the ground becomes frozen, it again descends below the frost (in some instances six feet below the surface), as before remains torpid until the next spring, when it again appears at the surface, being now about one and one-quarter inch in length. It continues to feed as usual upon vegetable substances until about the middle of June, when it ceases to feed, descends deeper into the earth, and becomes torpid until about the middle of August, when a complete change occurs. It opens lengthwise from the head, back near one-half its length, and forthwith appears in the chrysalis state, in which it remains nearly inactive until about the last of September, when it changes into a perfect state or beetle, and still remains in a nearly torpid state until the following spring, when, about the last of April, it ascends to the surface and immediately commences to reproduce its species.

It has thus far baffled the ingenuity of man to prevent its ravages, while fields of timothy have, within a few weeks, been entirely destroyed by this grub, and thousands of acres of corn have been totally lost in this county by its ravages.

According to the above statement, the larval stage proper would be of the duration of *two years*.

DISTRIBUTION.

This insect is one of very extensive distribution, being found in all parts of the United States, and extends northward into British America, where it occurred in Kirby's collections in north latitude 54° — the latitude of Labrador and Hudson's Bay.

ITS ENEMIES.

An excellent reason for the amount of injury which this insect imposes upon us is found in the few insect or other enemies that prey upon it, protected as it is by its subterranean life in its first three stages, and its unusually brief final stage. Only one insect parasite is known to attack it. It has, however, several vertebrate

enemies which render good service in restraining its unlimited increase: these will first be noticed.

The Skunk.—There is abundant testimony of the service rendered by skunks in the destruction of the grubs, and to the expertness which they manifest in the discovery of their presence and in making them their prey. It has been thought that one reason among others for the multiplication of the grub in localities in the western States and elsewhere is to be found in the wholesale slaughter of the skunk since their skins have obtained commercial value as a fur. In the *Country Gentleman* of December 1, 1881 (p. 778, col. 2), we have the following observations: "A few years ago, before skunk skins became so valuable as furs, I had a pair of half-tamed skunks which I used to let out every evening to dig for grubs, and it was wonderfully interesting to see their infallible scent or instinct in discovering the location, and then their astonishing celerity in digging out and gobbling the grubs. But most astonishing of all was the quantity of grubs those two little beasts would devour every evening. I have often watched them, and, incredible as it may seem, I could not say that they ate less than half a bushel daily!" To the above statement, the suggestion is added, that a very valuable ally might be obtained in our war against the white grub by removing the odoriferous glands from the skunk and domesticating him for employment as a grub killer. A correspondent from Washington county, N. Y., gives this testimony: "Before skunks began to be hunted, we had no trouble with the white grub, and I think they kept them down. I often found my corn-hills rooted into, evidently by skunks in search of grubs. Those dug into early in the season made a fair crop, while those untouched until later were destroyed. I have also seen the same signs in meadows and pastures (*Country Gentleman*, Dec. 29, 1881, p. 851).

Not only are the grubs so eagerly sought for and devoured by this animal, but it is also, according to Dr. Fitch, a natural destroyer of the beetle, its food consisting almost entirely of this insect during the short period of its existence (*Third-Fifth Repts. Ins. N. Y.*, p. 55). This is in accordance with the statement of Dr. Harris, to the effect that the beetles are devoured by the skunk, whose beneficial foraging is detected in our gardens by its abundant excrement filled with the wing-cases of these insects.

Raccoon.—Dr. Thomas (*Sixth Rept. Ins. Ill.*, p. 98) names the raccoon as one of the carnivorous animals that prey upon this insect, but does not state to what extent it destroys it.

Mole.—Prof. Claypole, a careful observer of the habits of insects and other animals, permits us to claim the mole as an auxiliary in our warfare against the white grub. The following is what he saw, writing from Yellow Springs, Ohio: "In digging potatoes this year, I observed the runs of a mole in all directions through the ground. It was a piece of old sod and very much infested with white worms, the larva of the cockchafer, *Lachnosterna fusca*. Many of the potatoes had been partly eaten by these worms, but I observed

that wherever a mole-run traversed a hill of potatoes no white worm could be found, even though the half-eaten potatoes were proof of his former presence. The inference is fair that the mole had found him first and eaten him, and very likely the mole's object in so thickly tunneling this piece of ground was to find these grubs" (*Canadian Entomologist*, xiv, p. 17).

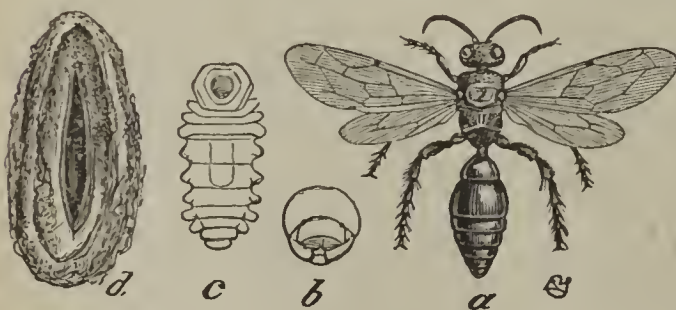
Domestic fowls.—If these be watched as they follow the plow in our gardens and fields in search of such insects as may be brought to the surface, it will be seen that they show a special fondness for the white grub. Their presence during the operation of plowing should, therefore, always be encouraged.

The Crow.—The common crow feeds upon both the beetle and the grub. It is believed by many that its frequent occurrence in corn-fields is the result of its fondness for the grub which is preying upon the young corn, rather than upon the corn itself. The studies that have been so ably conducted during the last few years upon the food of birds should have settled ere this the question beyond all doubt, whether the crow is to be driven from, or invited to, our corn-fields.

Other birds.—The beetles have been found in the stomach of the king-bird, *Tyrannus Carolinensis*, shot in the month of May. The robin, black-birds and jays are also said to feed upon them.

Insects.—The grub has also enemies among its own class, which prey upon it. Several of the predaceous beetles are said to devour it—species of the rapacious *Carabidæ*, probably *Calosoma calidum* and others, but their names have not been recorded.

A Parasite.—While many insect attacks are restrained through the beneficent aid of other insects, which, in our gratitude, we are apt to regard as specially commissioned to perform this duty for our protection, thus far we know of but a single parasite which is waging warfare upon the white grub. This insect was described and figured by Prof. Riley, in his *Sixth Report on the Insects of Missouri* (1874, pp. 123, 124), as the white grub parasite—*Tiphia inornata*. It is shown at *a* in the accompanying figure. It is one of the digger-



wasps, and the ease with which these creatures are able to burrow in the ground enables this one to discover the grub in its concealed retreats, and by depositing an egg upon the body, to provide the food needed for its progeny, and to insure the death of the attacked grub.* The par-

asitic larva, shown at *c*, having matured, it incloses itself for its changes

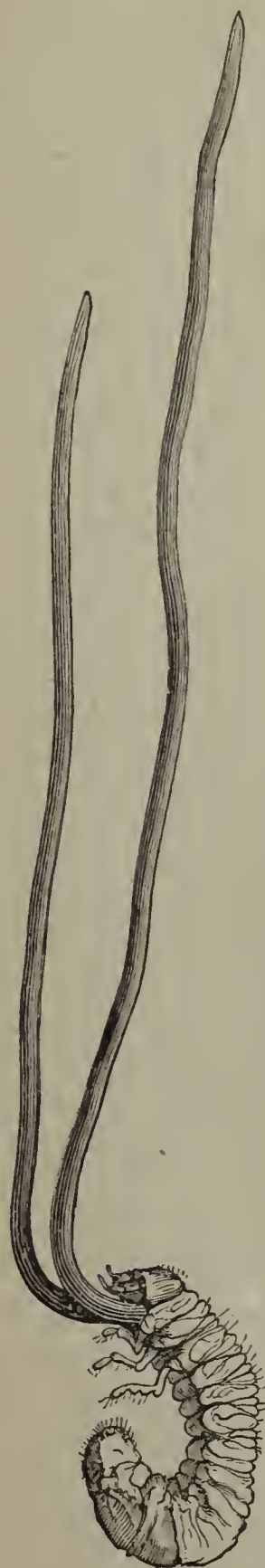
* For an interesting mention of a secondary parasitic attack—the larva of the *Tiphia* in its turn and while within its cocoon destroyed by a beetle known as *Rhipophora* (*Emmenadia*) *pectinatus* Fabr. var. *ventralis*—see Riley, *loc. cit.*, p. 125.

in "an egg-shaped cocoon of a pale golden-brown or buff color, and with a soft exterior surface, in touch as well as color." * * * Upon cutting this cocoon open, it will be found to consist of about a dozen delicate layers, the outer ones soft and loosely spun, the inner ones more and more compact and paler in color." The cocoon is shown at *d* in the figure. Their presence in the ground (from the above description and figure they may be easily recognized) serve to show the parasitic attack. They have in some instances been met with in such numbers in association with a formidable grub attack as to arrest attention and to induce inquiry into their character.

The White Grub Fungus.—For another destroyer of the white grub, and the most interesting of all that we have referred to, we have to turn to the vegetable kingdom — to that low class of plants known as *fungi*. From its being so often found upon this species, it has been popularly named, *the white grub fungus*. Scientifically, it is known as *Cordyceps Ravenelii* Berkeley.* It was described in 1857, but its economic importance in its association with the white grub was not known until brought to notice by Walsh, in 1867 (*Practical Entomologist*, ii, 1867, p. 116) upon the reception of specimens from a large number of the grub killed by this growth, which had been plowed up in a field in Iowa. Its character was not understood at the time, Mr. Walsh suggesting, that, but for the numbers found, the grub might have swallowed a seed which subsequently sprouted and grew. Later its fungoid character was disclosed. Its general appearance is that of a pair of elongate horns, green at first, but subsequently changing to brown, issuing from the lower side of the larva, between the head and the first joint. In length they vary from less than that of the larva, to three or four times as long. Its appearance, when it has attained the latter length, is shown in the accompanying figure.

This interesting parasite occurs at times, in considerable abundance, more particularly in the west and south. It has been met with in our State, specimens having been received by me from ex-Governor Seymour, occurring upon his farm, near Utica, and from others.

It has been suggested that this fungus attack might be extended, through propagation and distribution of the spores of the fungus, but I am not aware that the experiment has been made.



* Originally described as a *Cordyceps*, and subsequently referred to other genera, it has recently been restored to the *Cordyceps* of Fries, in *Sylloge Fungorum* of P. A. Saccardo (vol. ii, 1883, p. 573).

PREVENTIVES AND REMEDIES.

Passing now to the more practical portion of this paper, we will consider what may be done to control the ravages of the insect of which we have been speaking, and first, the preventive means that promise protection.

Ashes. — It is stated that for strawberries, which are so liable to attack, an efficient protection is found in placing a quantity of ashes, either leached or unleached, upon the ground before setting the plants. This is upon the authority of Dr. Barnes, of Owasso, Mich.

Tobacco. — A gentleman from Westwood, N. J., states, that by digging [burying] tobacco stems into strawberry beds, the injury of the grub may be prevented (*Country Gentleman*, Oct. 21, 1875, p. 669).

Rolling, etc. — Compacting the surface of the ground by treading it with sheep or cattle, or by the use of heavy rollers, might give protection from the deposit of eggs, by the inability of the beetle (if this be its habit) of excavating the earth for the purpose, and might also serve to prevent the easy passage of the grubs, if in the soil, from one root to another. Still this method, which has been urged for use against many insects by English writers, seems so opposed to the condition of looseness and pulverization of the soil which is well known largely to promote vegetable growth, that we incline to the belief that whatever protection it might yield from insect injury would be counterbalanced by a stunted crop.

Gas-lime. — Although not tested by experiment, I have great faith in the efficacy of gas-lime, as a protection from the deposit of the eggs of the beetle, or, if the protection be but partial, then, for the destruction of such eggs as may have been deposited. Upon ground to be seeded or planted, the lime, fresh from the works, might be distributed and worked into the soil, but where the crop to be protected is already upon the ground, the lime should first undergo such atmospheric exposure as would permit of its use as a top-dressing without harm to the vegetation. It should be applied during the month of May or June, or as soon as the beetles are seen upon the wing. For different methods of its application, I would refer to my First Annual Report, where I have treated at some length of gas-lime as an insecticide.

We may pass now to remedial measures, and first those referring to the destruction of the beetle.

Tree-shaking. — The May-beetle has a habit in common with many other species of becoming gregarious, in times of its great abundance, when it assembles in multitudes for the night upon fruit trees. This habit permits of its destruction in large numbers, and the reduction of the following brood to the extent that its eggs have not at this time been deposited, by shaking them from the trees upon sheets spread underneath. Dr. Harris records, that in this way two pailfuls of beetles were collected on the first evening

of the experiment — the number decreasing upon following evenings until the fifth, when only two beetles were to be found. He adds: "The best time, however, for shaking the trees * * * is in the morning, when the insects do not attempt to fly. They are most easily collected in a cloth spread under the trees to receive them when they fall, after which they should be thrown into boiling water to kill them, and may then be given as food to swine" (*Treat. Ins. Inj. Veg.*, 1862, p. 31).

Dr. Fitch, in referring to this remedy, gives the time in which the trees may be shaken with the best results, as between midnight and daylight, as would appear from the observations of Mr. Milo Ingalsbe, of South Hartford, Washington Co., N. Y. "He had seventy plum trees and a number of cherry trees of the choicest varieties, which never gave fairer promise of an abundant yield than at that time. But a swarm of these May-beetles suddenly gathered upon the trees, many of them being then splendidly in bloom, and in two nights, the 15th and 16th of May, wholly stripped them of their foliage, so that many of them were as naked as in winter. With their humming notes, these beetles were flying about the trees every evening until about ten o'clock, when they would settle in clusters of eight, ten, twenty or more, and would thus remain until daylight, when they would tumble down from the trees, flying but little, however, and hiding themselves wherever convenient to stay through the day (*Third-Fifth Repts. Ins. N. Y.*, 1859, p. 54).

Attracting to light. — The beetles, in their evening flights, are readily attracted to light, as is shown in the frequency with which they fly in at the open windows of our dwellings, public halls, churches, etc., in warm evenings, and the numbers that may be seen circling about the electric lights of our streets, or lying upon the pavements beneath, to which they have fallen. This well-known propensity of the beetle may be utilized to lure them to their destruction. If a lantern be placed above a vessel of water upon which two or three tablespoonfuls of kerosene has been poured, many of the beetles drawn to the light and striking against it will be thrown into the water and killed. Many other noxious insects may at the same time be killed by this method.

In our efforts to destroy the *larva*, we are met with several difficulties, of which these may be given:

1. Applications to the ground of sufficient strength invariably to kill the grub, of which several might be mentioned, would also be destructive to a growing crop.
2. The strongest applications that may with safety be applied would be so impaired in strength in entering and penetrating the ground as to become inefficient at a moderate depth.
3. The grub has the ability of withdrawing itself from the obnoxious application by burying itself deeper in the ground.

In consideration of the above and like difficulties, effort should be directed toward the discovery of some substance which will act

upon the grub through other means than its exceeding strength. Should it be of such a character as simply to be repulsive to its taste, there is reason to believe that, rather than to feed upon roots that are saturated with it, it would die of starvation. In this manner, perhaps, may be found the reputed efficacy of the application next to be noticed. Experiments in this direction are very desirable.

Salt. — The application of salt has been pronounced an effectual remedy, while it has also been said to be of no avail whatever. The remedy would be so simple, and withal so inexpensive, that the claim made for it should be tested by careful experiments. It is possible that the reputed success may have resulted from its employment in the year of the greatest ravages — that preceding the transformation to the beetle, for during this year (next after the application), from the moderate growth of the young grub, there would necessarily be a comparative immunity from injury. On the other hand, the ascribed failure may have followed a too economical use of the cheap material — perhaps through fear of injury to the crop. A gentleman who strongly recommends this remedy, presumably from having thoroughly tested its value, deems it essential that the salt should be used in large quantity. He writes: “The great error with those who have used it with unsatisfactory results has been its scanty application. I can assure the reader that grass or potatoes will grow luxuriantly under an application of *one ton and a half per acre*, which quantity would be sure to result in the complete extermination, not only of the grub, but every other kind of worm, and prevent the scab and other excrescences which sometimes appear on potatoes, as well as preventing rot. A less quantity, say half [three-fourths of a ton], or even two or three barrels to the acre, though of course not as effectual, will accomplish much’ (*Country Gentleman*, for Aug. 3, 1882, p. 601, c. 2).

If the above testimony to the value of salt as a grub-killer shall be sustained by further experiment, I would strongly urge, in view of the periodic character of these attacks in localities that the salt be applied *in the year of the abundant appearance* of the beetle, and preferably during the month of August or September, although no injury from the grub may be apparent. At this time the young grubs which are produced from the eggs deposited in June are within reach of the application and may be killed far more readily than when they have attained additional powers of resistance in another year’s growth.

Rooting out by Swine. — The value of swine in freeing infested grass lands from the grub has often been urged, and we think is not overestimated. I believe that this remedy will prove successful, if good rooters be employed, when other methods fail. Dr. Fitch has written as follows of it:

“I would recommend the placing of a temporary fence around that portion of the meadow or pasture which is so thronged with these grubs, thus for a while converting the patch into a hog pasture.

The propensity of these animals for rooting and tearing up the turf, we are all aware, is for the very purpose of coming at and feeding upon the grubs and worms that are lurking therein; and who knows but that this rooting propensity, which has all along been complained of as being the most vicious and troublesome habit which belongs to swine, may after all turn out to be the most valuable and necessary to us of any of the habits with which they are endowed.

* * * I cannot but think these animals, confined upon a spot so overstocked with grubs, would in a short time ferret out and devour every one of them, leaving the soil cleansed, mellowed, manured, and well prepared for being immediately laid down to grass again, or for receiving any other rotation of crops for which the proprietor may deem the spot best adapted."

Mr. Walsh, formerly State Entomologist of Illinois, had equally strong faith in the value of this method of overcoming the white grub attack. After discoursing upon the great increase in the insect as observed in a few preceding years, its growing injury to young nurseries, and its violent irruption upon corn, which had formerly been exempt from it, he adds: "I suspect that the above phenomena are to be wholly or partially attributed to the introduction of improved breeds of hogs in the place of the old, slab-sided, long-nosed prairie rooters, and to the passage of laws compelling people to keep their hogs under fence, instead of allowing them to run at large. * * * Within the last few years such laws have been very generally passed in the Western States. * * * Hence, I am inclined to infer that the presence of the white grub is often to be attributed to the absence of the hog."

Without occupying your time in a review and discussion of various other methods that have been proposed for destroying the grub, I will refer to but one other, which I regard as an effectual one, wherever it may be resorted to:

Starvation. — As soon as the attack is discovered, upon the removal of the crop, collect and burn, as far as practicable, all the vegetable material upon which the larvæ could feed. If the ground has been cultivated for vegetables, gather all the stalks, stems, vines, etc., together with the roots, in piles, and burn them. If the land be in grass, after feeding as closely as possible, plow thoroughly, and follow during the autumn with such additional plowings and harrowings as shall best tend to destroy all vegetable life. At this time gas-line, if procurable, should be applied. Repeat these operations in the following spring, and allow the land to lie fallow for the year. Compliance with these directions would not only starve out the white grub, but also whatever wire-worms, cut-worms, and other underground larvæ there might be present.

The fallowing of the land for an entire year may be found to be unnecessary. It is not improbable that it might be preferable that the thorough breaking up of the ground in the autumn and spring be followed with a crop of buckwheat. Wonderful efficacy has been claimed for this plant, in freeing the ground from wire-worms —

the larvæ of other beetles, and we know not why it may not be equally efficient when employed against the white grub. By all means, let thorough tests of its value be made, since the trial is so simple. Hon. A. B. Dickenson, after experimenting with salt and lime for destroying wire-worms, has stated: "I have only proved one remedy for the rascals, and that is, to break the sod and sow it to buckwheat; plow late and as often as possible in the fall, and then sow it to peas in the spring; with the like plowing next fall, they will not disturb any crop the next season."

In England, a crop of mustard is regarded as an antidote against the wire-worm. In an address before an agricultural society there, the speaker, after detailing some successful experiments upon a small scale with mustard, stated as follows: "Thus encouraged by these results, I sowed the next year a whole field of forty-two acres, which had never repaid me for nineteen years, in consequence of nearly every crop being destroyed by the wire-worm; and I am warranted in stating that *not a single wire-worm could be found the following year*, and the crop of wheat throughout was superior to any that I had grown for twenty-one years." Certainly this very successful experiment, confirmed as it is by many others that I find recorded, deserves to be faithfully tested with the white grub.

STUDY OF THE INSECT DESIRED.

I have now given you the characters by which the notorious white grub may be recognized; have narrated so much of its life history as is known to us; have told you of its ravages and of the enemies that prey upon it; and so far as I am able, have pointed out the principal means for the prevention of its depredations, indicating those which are deemed the best.

To me, and perhaps to some of my audience, it is not the satisfactory exhibit of knowledge of the species that is desirable. As before stated, there are several points in its history upon which information is still needed. May I ask, and in return be favored with the aid of the members of this society toward supplying what is lacking? You have the opportunities for making valuable contributions with but little effort, and of a kind that may not be obtained from other sources. I would, therefore, beg of those present, and of others who are interested in the eminently practical work in which we are engaged, to make observation and to send me the results from time to time of some of the following points. Even in a communication of two or three lines, quite important information may be contained.

The earliest and the latest appearance of the May-beetle in any year.

The comparative abundance of the beetle in different years, particularly noting such years of unusual abundance, as may appear to indicate a periodicity of three years.

The presence or absence of eggs in the female beetle, to be ascertained by cutting open the abdomen and examining the contents.

The female may be told by the three-leaved (when spread apart) terminal club of the antennæ being but about one-half the length of that of the male. My observations tend to the probability that the eggs are deposited before the beetle comes abroad for flight and food. It is important that this point should be determined.

The re-entering the ground by the female for depositing her eggs; the character of the soil entered as to its degree of compactness; and the crop cultivated thereon.

The manner of oviposition, if in a mass within a ball of earth as stated, or singly — the number of eggs, and depth at which placed. It is thought that this can be ascertained the most easily by taking a few examples of each sex when freshly turned out from the ground while yet in their pale color, and confining them in a box of sod-covered earth, and, after their death, carefully examining the soil for the eggs that may have been deposited. Or the beetles uncovered by the plow in the early spring might be sent to me for this observation.

The effects of gas-tar water, ammoniacal liquid when it can be obtained, guano, phosphates and superphosphates, hog manure, kainite, sludge acid, alkali waste, bisulphide of carbon, etc., employed either as preventive of egg deposit or for killing the larvæ. Even negative results from the use of any of the above applications should be recorded.

In conclusion, gentlemen, permit me to solicit your aid, not only in the above, but in other observations upon our insect foes, where aid is still needed. I believe that most of you have been led to appreciate the value of the investigations in which I am engaged. Some of you know my devotion to the work, and some of the results attained. It is my aim to make my official labors creditable to the State, and of value to the community at large. The members of the State Agricultural Society, to many of whom I am already under deep obligations, can do very much toward aiding me in my purpose. I beg that they will do so.

SORGHUM CANE IN JEFFERSON COUNTY IN 1883.

COMMUNICATION TO THE SECRETARY OF THE JEFFERSON COUNTY AGRICULTURAL SOCIETY.

NORTHERN NEW YORK PIONEER SUGAR CANE MILLS, }
WATERTOWN, *Dec.* 28, 1883. }

DEAR SIR — In answer to your letter asking for information in regard to sorghum canes and its future prospects, I have the pleasure to report that there were planted in this county last spring about thirty acres of cane, all of which was of the early Amber variety, but, owing to the very unfavorable season, very little of it was worked.

The spring was very late, so that cane seed could not be planted until the 1st of June and much of it as late as the 10th; most of the seed came up very even and gave the appearance of a good stand, but unfortunately for us it proved to be very wet and cold all through the season, and on the 8th and 9th of September most of the cane was killed outright by the frost. I had five acres here at home that was not hurt much at that time and that was allowed to stand until the last of September, when a heavy frost completely killed it, none of it having as yet reached maturity. We began to work the cane about the 20th of September and made about five hundred gallons of molasses; did not attempt to make sugar; only a portion of the five acres was worked; the balance was left standing until late in November, when the cattle were turned into it, and to our great surprise they ate it very greedily, and showed a large increase in milk; they had previously been fed on cornstalks. It seems the cane had become soft from being frozen and thawed so many times, and they ate it all clean, taking the stalks clear to the ground.

I have heretofore fed it to some extent, but always cut and cured the canes, when I have found that the cattle would only eat the leaves and a small portion of the tops, and from what I saw this season I believe that it would be well for dairymen to try a piece; let it stand until after cold weather comes on, then let the cattle into it.

When the cattle were turned out in the morning they would start straight for the cane field, even though we would feed them cornstalks, and at the time there was quite an amount of snow on the

ground. Fed in this way it saves the expense of cutting and curing, and I never had cattle do as well on any feed as they did on that.

In the three years before that I have been in the sorghum business, it has averaged at least one hundred and fifty gallons per acre, and with all this being such a bad year for us, I do not know of a single farmer that had cane planted this year but will plant next, and in most cases will plant larger pieces. All seem satisfied that it will grow here and do well any season that corn will mature, and it is a well-known fact that in the county there will be this year scarcely enough good corn for seed. Cane requires the same weather to grow it as corn, with this difference, the cane roots run very deep, so that a drought that would ruin the corn will not hurt the cane in the least.

We also planted several small patches on the pine plains as an experiment, and to our great surprise it did as well as any we had anywhere; we used one hundred and fifty pounds of phosphate per acre on the sand plains and shall plant again next season so as to determine more perfectly as to whether it would pay to start a large mill there or not; but from what I saw of it this last season and knowing that it is on just such lands the Rio Grande Company of New Jersey have gained such grand results, I can see no reason why in a short time all of this now abandoned land shall not be turned to the growing of sugar.

If the farmers of the county would only start into sorghum growing and raise at least enough for their own use, they would save paying out a large sum of money and also be sure that they at least had pure syrup, and but few are aware of how many ways cane syrup can be used in cooking. Mills might be built in neighborhoods and some one make it up for them at so much per gallon or on shares. A mill that would make one hundred gallons per day need not cost over \$300 and would be run by two men and two horses. I will gladly help in any way persons that would like to start a mill.

The proper way to start a mill would be for some one to call a meeting and talk it over; each one to put in a piece of cane and have one to make it up, as several might buy the mill together; and I am sure if they once get started at it they would each year plant more and the business would surely enlarge.

When we know that we are annually paying out to foreign countries for sugar and the duties thereon nearly \$140,000,000, it seems to me that our agricultural societies ought to give to the sorghum growers and the men who are introducing it into the country all the aid and information possible.

Sorghum has, as this year abundantly proved, passed beyond the experimental point, and can now be classed as a permanent crop in agriculture. It has already attained a greater annual value than buckwheat, is worth nearly as much as the rye crop, and more than a third of the value of the barley product.

F. C. WILSON.

ANALYSES OF FERTILIZERS.

The following samples of fertilizers have been analyzed for the society during the year 1883. Numbers 1, 2 and 3 were sent by the secretary of the Owasco Grange, Skaneateles, N. Y.; numbers 4 to 26, by the secretary of the Riverhead, Suffolk Co., Town Agricultural Society; numbers 27 and 28 by T. L. Harison, Morley, N. Y., and number 29 by the secretary of the Owasco Grange. The descriptions are given as received with the samples, except in the case of number 29, in which a correction has been made on the joint request of the sender and the manufacturers:

No. 1. Acid phosphate, manufactured and sold, February 12, by Farmers' Fertilizer Co., Syracuse, to Stephen Thornton, Skaneateles.

No. 2. Acme brand bone black, manufactured by Williams, Clark & Co., New York, sold, April 1, by Arthur S. Core, Rochester, to Owasco Grange, Skaneateles.

No. 3. Acme brand acid phosphate, manufactured by Williams, Clark & Co., New York; sold, April 1, by Arthur S. Core, Rochester, to Owasco Grange, Skaneateles.

No. 4. Dried ground fish scrap, manufactured and sold, March 31, by E. Tuthill & Co., Mattituck, to O. F. Wells, Aquebogue.

No. 5. Muriate of potash, imported by Lister Brothers, Newark, N. J., sold, March 30, by G. W. Young, Aquebogue, to J. T. Downs, Riverhead.

No. 6. Corn fertilizer, manufactured and sold, April 2, by J. G. Phelps, Jamaica, to Daniel Warner, Baiting Hollow.

No. 7. Standard superphosphate, manufactured by Lister Brothers, Newark, N. J., sold, May 11, by G. W. Young, Aquebogue, to J. T. Downs, Riverhead.

No. 8. Dried ground fish guano, manufactured and sold, April 2, by G. Tuthill & Co., Mattituck, to H. L. Hallock, Jamesport.

No. 9. Pure bone, manufactured and sold, May 1, by L. L. Crocker, Buffalo, to H. F. Luce, Riverhead.

No. 10. Sulphate of ammonia, manufactured and sold, February 26, by Martin Kalbfleisch's Sons, New York, to E. Aldrich & Sons, Mattituck.

No. 11. Lobos guano, sold, May 1, by James E. Wells, Riverhead, to George M. Terry, Aquebogue.

No. 12. Acid phosphate, manufactured by Atlantic and Virginia Fertilizer Co., sold, April 5, by J. E. Phelps, Jamaica, to J. W. Woodhull, Jamesport.

No. 13. Sulphate of ammonia, manufactured by Charles Spear, Jr., New York, sold, April 5, by J. E. Phelps, Jamaica, to J. W. Woodhull, Jamesport.

No. 14. Soluble Pacific guano, manufactured by Pacific Guano Co., Boston, Mass., sold, March 17, by D. W. Skidmore, Jamesport, to O. F. Wells, Aquebogue.

No. 15. Dissolved bone, manufactured by H. J. Baker & Brother, New York, sold, February 23, by Wells & Hudson, Riverhead, to J. T. Downs, Riverhead.

No. 16. Sulphate of ammonia, manufactured by S. R. Van Duzer, New York, sold, February 10, by R. A. Vail, Riverhead, to Z. Hallock, Jamesport.

No. 17. Muriate of potash, imported by A. S. Malcolm, New York, sold, April 12, by J. E. Phelps, Jamaica, to John W. Woodhull, Jamesport.

No. 18. Muriate of potash, imported by Mapes Formula and Guano Co., New York, sold, March 20, by S. P. Tuthill, Mattituck, to E. Aldrich & Sons, Mattituck.

No. 19. Dissolved bone, manufactured by Lister Brothers, Newark, N. J., sold, March 28, by G. W. Young, Aquebogue, to A. T. Downs, Riverhead.

No. 20. Potato fertilizer, manufactured and sold, May 1, by L. L. Crocker, Buffalo, to H. F. Luce, Riverhead.

No. 21. Nitrate of soda, sold, February 21, by S. R. Van Duzer, New York, to C. H. Reeve, Aquebogue.

No. 22. Plain superphosphate, manufactured by Mapes Formula and Guano Co., New York; sold, March 20, by S. P. Tuthill, Mattituck, to E. Aldrich & Sons, Mattituck.

No. 23. Potash salt, sold, May 10, by Corwin & Vail, Riverhead, to Z. Hallock, Jamesport.

No. 24. Superphosphate, manufactured by Bradley Fertilizer Co., Boston, Mass., sold, March 30, by H. H. Howell, Baiting Hollow, to J. T. Downs, Riverhead.

No. 25. Great Planet Brand B, manufactured by Clark's Cove Guano Co., New Bedford, Mass., sold, March 11, by Isaac Reeve, Jamesport, to C. H. Reeve, Aquebogue.

No. 26. Dried ground fish guano, manufactured and sold, March 1, by Daniel Vail, Riverhead, to S. O. Benjamin, Aquebogue.

No. 27. Standard superphosphate, manufactured by Farmers' Fertilizer Co., Syracuse, sold, June 19, by D. M. Jones, Canton, to T. L. Harison, Morley.

No. 28. Homestead superphosphate, manufactured by Michigan Carbon Works, Detroit, Mich., sold, June 9, by W. Z. Whitney, Morley, to T. L. Harison, Morley.

No. 29. Plain dissolved bone, manufactured by Farmers' Fertilizer Co., Syracuse, sold, September 1, by Dwight Foster, Syracuse, to Owasco Grange, Skaneateles.

The results of the analyses will be found in the table on page 43. The valuations are carried out in conformity to the schedule of trade

values adopted, for the year 1883, by the chemists of the Connecticut and New Jersey Experiment Stations, as follows:

	Price per lb. cts.	Per unit.
Nitrogen in nitrates	20	\$4 00
Nitrogen in ammonia salts.....	26	5 20
Nitrogen in Peruvian guano, fine steamed bone, dried and fine ground blood, meat and fish, superphosphates and special man- ures.....	23	4 60
Nitrogen in coarse or moist blood, meat or tankage, in cotton seed, linseed and castor pomace.....	18	3 60
Nitrogen in fine ground bone, horn and wool dust.....	17	3 40
Nitrogen in fine medium bone.....	15	3 00
Nitrogen in medium bone.....	14	2 80
Nitrogen in coarse medium bone.....	13	2 60
Nitrogen in coarse bone, horn shavings, hair and fish scrap.....	11	2 20
Phosphoric acid soluble in water.....	11	2 20
Phosphoric acid reverted, and in Peruvian guano.....	8	1 60
Phosphoric acid insoluble, in fine bone, fish guano and superphos- phates.....	6	1 20
Phosphoric acid insoluble, in fine medium bone.....	5½	1 10
Phosphoric acid insoluble, in medium bone.....	5	1 00
Phosphoric acid insoluble, in coarse medium bone	4½	90
Phosphoric acid insoluble, in coarse bone, bone ash and bone black	4	80
Phosphoric acid insoluble, in fine ground rock phosphates.....	2½	45
Potash, in high grade sulphate.....	7	1 40
Potash, in low grade sulphate and kainit.....	4½	85
Potash, in muriate, or potassium chloride.....	4½	85

TABLE giving the results of the ANALYSES of twenty-nine samples of COMMERCIAL FERTILIZERS analyzed during the year 1883, for the society, by WILLIAM M. HABIRSHAW, F. C. S., chemist to the society, chemist to the Chemical Trade of New York, and analyst to the New York Produce Exchange, with valuations according to the schedule of Trade Values, for the year 1883, adopted by the Connecticut and New Jersey State Experiment Stations. For particular descriptions of the articles, see pages 40 and 41.

No. for the year 1883.	DESCRIPTION, ETC., OF SAMPLES AND NAMES OF MANUFACTURERS OR IMPORTERS.	Nitrogen other than organic.	Value.	Nitrogen organic.	Value.	Soluble phosphoric acid.	Value.	Reverted phosphoric acid.	Value.	Insoluble phosphoric acid.	Value.	Potash as sulphate.	Value.	Potash as chloride.	Value.	Total valuation.	Cost.
1	Acid phosphate, Farmers' Fertilizer Co., Syracuse, N. Y.	.....	.....	.....	.....	11.08	\$24.37	1.43	\$2.28	.87	.....	.....	.....	.....	.....	27 12 26	00
2	Acme brand, bone black, Williams, Clark & Co., New York	.....	.....	.....	.....	9.98	21 95	2.05	3 28	4.90	.....	.....	.....	.....	.....	30 09 30	00
3	Acme brand, acid phosphate, do do	.....	.....	.....	.....	9.91	21 80	2.02	3 23	2.19	.....	.....	.....	.....	.....	26 23 22	50
4	Dried ground fish-scrap, E. Tuthill & Co., Mattituck, N. Y.	.....	.....	8.99	41 12	.....	.....	.....	.....	6.66	.....	.....	.....	.....	.....	49 11 45	00
5	Muriate of potash, Lister Bros., Newark, N. J. (1)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.80	.....	45 73 40	00
6	Corn fertilizer, J. E. Phelps, Jamaica, N. Y.	1.39	\$6 58	.....	.....	6.27	13 80	1.49	2 36	1.29	.....	.....	.....	5.85	.....	39 66 47	00
7	Standard superphosphate, Lister Bros., Newark, N. J.	.....	.....	2.26	10 40	8.28	18 22	1.46	2 33	1.82	.....	.....	.....	1.97	.....	32 97 40	00
8	Dried ground fish guano, E. Tuthill & Co., Mattituck, N. Y.	.....	.....	2.02	9 29	.....	.....	.....	.....	8.62	.....	.....	.....	.....	.....	50 77 45	00
9	Pure bone, L. L. Crocker, Buffalo, N. Y.	.....	.....	8.97	40 43	.....	.....	.....	.....	24.86	.....	.....	.....	.....	.....	37 74 42	00
10	Sulphate of ammonia, Martin Kalbfleisch's Sons, N. Y. (2)	20.75	107 90	3.47	11 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	107 90 92	00
11	Lobos guano (sold by) James E. Wells, Riverhead, N. Y.	3.95	20 54	1.05	3 78	.40	88	7.80	12 48	7.40	\$1 29	1.52	.....	.....	.....	47 85 53	00
12	Acid phosphate, Atlantic and Virginia Fertilizer Co.	.....	.....	.....	.....	8.41	18 50	3.05	4 88	3.76	.....	.....	.....	.....	.....	25 45 26	00
13	Sulphate of ammonia, Charles Spear, Jr., New York (3)	20.77	108 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108 00 90	00
14	Soluble Pacific guano, Pacific Guano Co., Boston, Mass.	1.12	5 82	1.24	4 77	6.99	15 38	2.28	3 65	3.84	4 61	.....	.....	1.11	.....	34 87 46	00
15	Dissolved bone, H. J. Baker & Bro., New York	.....	.....	.25	1 15	18.05	39 71	.81	1 30	1.53	1 84	.....	.....	.....	.....	44 00 35	00
16	Sulphate of ammonia, S. R. Van Duzer, New York (4)	21.18	110 14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110 14 90	00
17	Muriate of potash, A. S. Malcolm, New York (5)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.81	47 44	47 44 42	00
18	Muriate of potash, Mapes Formula and Guano Co., N. Y. (6)	.....	.....	1.92	8 81	.....	.....	.....	.....	.....	.....	.....	.....	50.27	42 73	42 73 39	00
19	Dissolved bone, Lister Bros., Newark, N. J.	.....	.....	2.16	7 78	9.24	20 53	.80	1 28	1.22	1 34	.....	.....	2.03	1 72	33 48 35	00
20	Potato fertilizer, L. L. Crocker, Buffalo, N. Y.	.34	1 60	.....	.....	5.99	13 18	1.22	1 95	2.81	3 40	.....	.....	4.93	4 19	32 10 38	00
21	Nitrate of soda, (sold by) S. R. Van Duzer, N. Y. (7)	16.15	64 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64 60 62	50
22	Plain superphosphate, Mapes Formula and Guano Co., N. Y.	.....	.....	.91	4 19	50.41	66 90	1.63	2 61	.....	.....	.....	.....	.....	.....	73 72 72	00
23	Potash salt, (sold by) Corwin & Vail, Riverhead, N. Y.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.00	10 25	10 25 12	50
24	Superphosphate, Bradley Fertilizer Co., Boston, Mass.	.99	5 15	1.68	7 72	8.47	18 63	1.64	2 62	1.69	2 03	.....	.....	2.84	2 41	38 56 45	00
25	Great Planet brand B., Clark's Cove Guano Co., N. Bedford, Mass.	4.20	24 30	.14	50	7.58	16 65	.92	1 47	1.22	1 46	3.69	.....	.....	.....	47 52 48	00
26	Dried ground fish guano, Daniel Vail, Riverhead, N. Y.	.....	.....	8.45	38 87	.....	.....	.....	.....	6.37	8 24	.....	.....	.....	.....	47 11 45	00
27	Standard superphosphate, Farm's Fertilizer Co., Syracuse, N. Y.	.....	.....	.84	3 02	6.15	13 53	1.96	3 14	2.41	2 89	.....	.....	1.96	1 66	24 24 35	00
28	Homestead superphos'e, Mich. Carbon Works, Detroit, Mich.	.....	.....	1.72	7 91	7.63	16 79	1.45	2 32	.94	1 13	1.24	.....	.....	.....	29 27 40	00
29	Plain dissolved bone, Farmers' Fertilizer Co., Syracuse, N. Y. (8)	.....	.....	.....	.....	4.93	.....	9.78	.....	12.63	.....	.....	.....	.....	.....	.....	25 50

(1) Cost of potash, \$3.71; (5) do. \$3.76; (6) do. \$3.88; av. of 3, \$3.78 per 100 lbs. (2) Cost of nitrogen, \$22.16; (3) do. \$21.25; (7) do. \$19.32; (4) do. \$21.66; av. of 3, 4 and 7, \$21.69 per 100 lbs. (8) Contains Charleston rock acidulated, with an iron and alumina phosphate 37.35 per cent, as against 22.33 per cent (approximately) of lime phosphate.

A W A R D S

AT THE FORTY-THIRD ANNUAL CATTLE SHOW AND FAIR OF THE NEW YORK STATE AGRICULTURAL SOCIETY, HELD AT ROCHESTER, SEPTEMBER 10 TO 14, 1883.

CATTLE.

SHORTHORNS.

Shorthorn Herd Prize.

Palmer & Stuart, Hamlin, N. Y.; large gold medal.

Bull, Mariner's Oxford, red roan, bred by Frank C. Cornell, Ithaca, N. Y.; calved December 22, 1879, sire Oxford Geneva; 24221, dam Mariner's Daisy by Mariner 2nd, 17682, gr. d. Red Daisy 8th of Fairview by Financier, 11956.

Cow, Allenton Rose, red roan, bred by W. C. Allen, Allenton, N. Y.; calved February 25, 1877, sire Duke of Chestnut Grove, 21494, dam Kentucky Rose by General Sherman, 5709, gr. d. Rose by Young Duke, 6323.

Cow, Allenton Maid, red roan, bred by W. C. Allen, Allenton, N. Y.; calved April 15, 1877, sire Duke of Chestnut Grove, 21494, dam Daisy Maid 5th by Prince Nicholas, 11235, gr. d. Daisy Maid by Clearchus, 2636.

Cow, Lady Blanche, 5th, white, bred by A. W. Griswold, Morrisville, Vt.; calved December 25, 1872, sire 4th Lord Oxford, 5903, dam Blanche by Sachem, 935, gr. d. Fayaway by Yorkshireman, 189.

Cow, Lady Thorndale, red and white, bred by Frank C. Cornell, Ithaca, N. Y.; calved May 12, 1880, sire Oxford Geneva, 24221, dam Miss Thorndale 2nd by Duke Vanneter, 11872, gr. d. Miss Thorndale by 11th Duke of Thorndale, 5611.

Heifer, Lady Eliza of Hamlin, red and white, bred by Frank Palmer, Hamlin, N. Y.; calved January 12, 1882, sire Mariner's Oxford, 36175, dam Bloom by Royalist, 10923, gr. d. Lady Van Tromp by Kirklevington, 5860.

Shorthorn Bulls over Three Years Old.

Daniel C. Munro, Elbridge, N. Y.; first prize, fifty dollars; Earl of Clifton, red, bred by Charles M. Lansing, Niagara, Canada; calved May 17, 1879, sire Baron Percy, 28549, dam Countess of Belvoir by 22nd Duke of Airdrie, 16695, gr. d. Campaspe 2nd by 4th Grand Duke of Oxford, 5734.

Palmer & Stuart, Hamlin, N. Y.; second prize, twenty-five dollars; Mariner's Oxford, red roan, bred by Frank C. Cornell, Ithaca, N. Y.; calved December 22, 1879, sire Oxford Geneva, 24221, dam Mariner's Daisy by Mariner 2nd, 17682, gr. d. Red Daisy 8th of Fairview by Financier, 11956.

Shorthorn Bulls Two Years Old.

George H. Bell, Rome, N. Y.; first prize, forty dollars; Earl of Glen, red, bred by John H. Starin, Fultonville, N. Y.; calved March 14, 1881, sire Glen Oxford 2nd, 32721, dam Maud 6th by Earl of Cambridge, 23018, gr. d. Maud 3rd by Oxford Duke, 18775.

George Taber, East Aurora, N. Y.; second prize, twenty dollars; 6th Duke of Erie, roan, bred by Ira S. Adams, East Aurora, N. Y.; calved April 5, 1881, sire 3rd Duke of Erie, 29183, dam Frantic 26th by Oxford Duke 5th, 15076, gr. d. Frantic 16th by Victor, 7352.

Shorthorn Bulls One Year Old.

Benjamin Fellows, Clifton, N. Y.; first prize, thirty dollars; Roan Duke 11th, red with little white, bred at Bow Park, Brantford, Canada; calved March 30, 1882, sire Wild Eyes Duke, 34103, dam Roan Duchess 21st by Duke of Oxford 38th, 26351, gr. d. Blanche 14th by 24th Duke of Oxford (31002).

M. B. Ritter, Waterloo, N. Y.; second prize, fifteen dollars, Senator; red, bred by James Russell, Richmond Hill, Ontario, Canada; calved February 5, 1882, sire British Statesman (42847), dam Isabella 4th by High Sheriff 3rd, 39278, gr. d. Isabella by Wellington (32828).

Shorthorn Bull Calves.

William S. Moore, Mt. Upton, N. Y.; first prize, ten dollars; Duke of Upton, roan, bred by exhibitor; calved December 19, 1882, sire Pride of Upton, dam Linda by Duke of Warwick, gr. d. Lilac by Duke of Ormond, 4746.

Daniel C. Munro, Eldridge, N. Y.; second prize, five dollars; Jude, red and white, bred by exhibitor; calved May 22, 1883, sire Earl of Clifton, 35370, dam Crummie 2nd by Major Booth, 30240, gr. d. Crummie by Royal Belleville, 12843.

Shorthorn Cows over Three Years Old.

S. Spencer & Son, Kiantone, N. Y.; first prize, forty dollars; Conewango 4th, red roan, bred by exhibitors; calved March 6, 1877, sire 3rd Senor of Fairview, 20948, dam Maid of Genesee by Marmaduke, 5935, gr. d. Princess Beauty by Prince of Wales, 5100.

Palmer & Stuart, Hamlin, N. Y.; second prize, twenty dollars; Lady Blanche 5th, white, bred by A. W. Griswold, Morrisville, Vt.; calved December 25, 1872, sire 4th Lord Oxford, 5903, dam Blanche by Sachem, 935, gr. d. Fayaway by Yorkshireman, 189.

Shorthorn Heifers Two Years Old.

Benjamin Fellows, Clifton, N. Y.; first prize, thirty dollars; La Belle, red and white, bred by exhibitor; calved October 21, 1880, sire Earl of Oxford, 35422, dam Red Rose 11th by Don John, 29063, gr. d. Red Rose 10th by 5th Duke of Hillsdale, 31487.

S. Spencer & Son, Kiantone, N. Y.; second prize, fifteen dollars; Conewango 11th, red with some white, bred by exhibitors; calved February 2, 1881, sire Bell Duke of Vinewood, 31788, dam Conewango 5th by 3rd Senor of Fairview, 20948, gr. d. Conewango by Baron of Oxford, 18631.

Shorthorn Heifers One Year Old.

Palmer & Stuart, Hamlin, N. Y.; first prize, twenty dollars; Lady Eliza of Hamlin, red and white, bred by Frank Palmer, Hamlin, N. Y.; calved January 12, 1882, sire Mariner's Oxford, 36175, dam Bloom by Royalist, 10923, gr. d. Lady Van Tromp by Kirklevington, 5860.

S. Spencer & Son, Kiantone, N. Y.; second prize, ten dollars; Conewango 12th, white, bred by exhibitor; calved December 22, 1881, sire Highland Lad, 29835, dam 2d Maid of Genesee by Roderick Dhu 12810, gr. d. Maid of Genesee by Marmaduke, 5935.

Shorthorn Heifer Calves.

Palmer & Stuart, Hamlin, N. Y.; first prize, ten dollars; Lady Alice of Hamlin, red roan, bred by Isaac Palmer, Hamlin, N. Y.; calved December 10, 1882, sire Mariner's Oxford, 36175, dam Bloom by Royalist, 10923, gr. d. Lady Van Tromp by Kirklevington, 5860.

Daniel C. Munro, Elbridge, N. Y. ; second prize, five dollars; Clytie, red, bred by exhibitor ; calved February 21, 1883, sire Earl of Clifton, 35370, dam Bess by Major Booth, 30240, gr. d. Crochet 9th by 2nd Duke of Skaneateles, 26387.

DEVONS.

Devon Herd Prize.

Joseph Hilton, New Scotland, N. Y. ; large gold medal.

Bull, Prince of Wales 20th, bred by exhibitor ; calved December 12, 1878, sire Crown Prince, 434, dam Edith 9th by Prince of Wales, 151, gr. d. Fanny by Prince of Wales, 151.

Cow, Edith 12th, bred by exhibitor ; calved December 12, 1875, sire Prince of Wales, 151, dam Edith 4th by Prince of Wales, 151, gr. d. Edith 2nd by Sachem, 1089.

Cow, Edith 14th, bred by exhibitor ; calved January 3, 1878, sire Crown Prince, 434, dam Edith 4th by Prince of Wales, 151, gr. d. Edith 2nd by Sachem, 1089.

Cow, Edith 16th, bred by exhibitor ; calved February 9, 1879, sire Crown Prince, 434, dam Edith 12th by Prince of Wales, 151, gr. d. Edith 4th by Prince of Wales, 151.

Heifer, Lucy Crown, bred by exhibitor ; calved March 3, 1881, sire Crown Prince, 434, dam Edith 13th by Prince of Wales, 151, gr. d. Edith 7th by Prince of Wales, 151.

Heifer, Lady Jane Edith, bred by exhibitor ; calved January 8, 1882, sire Prince of Wales 20th, 1395, dam Edith 14th by Crown Prince, 431, gr. d. Edith 4th by Prince of Wales, 151.

Devon Bulls over Three Years Old.

Joseph Hilton, New Scotland, N. Y. ; first prize, fifty dollars ; Prince of Wales 20th, bred by exhibitor ; calved December 12, 1878, sire Crown Prince, 434, dam Edith 9th by Prince of Wales, 151, gr. d. Fanny by Prince of Wales, 151.

Charles W. Martin, South Worcester, N. Y. ; second prize, twenty-five dollars ; Duke Chenango, bred by E. M. Johnson & Son, Afton, N. Y. ; calved April 10, 1877, sire Billy, 300, dam Red Rose by Sachem, 1089, gr. d. Primrose by Empire, 534.

Devon Bulls Two Years Old.

A. F. Bronson, Vernon, N. Y. ; first prize, forty dollars ; Wonder, bred by exhibitor ; calved May 10, 1881, sire Brant, 1344, dam Flora by Grant, 638, gr. d. Tilt by Dandy, 445.

A. W. Rumsey, Westfield, N. Y. ; second prize, twenty dollars ; True Briton, bred by William H. Jones, South Montrose, Pa. ; calved May 14, 1881, sire Jones' Prince of Wales, 751½, dam Rose of May by Prince of Wales 12th, 1002, gr. d. Old Rose 3rd by Comet, 420.

Devon Bulls One Year Old.

Joseph Hilton, New Scotland, N. Y. ; first prize, thirty dollars ; Prince of Devons, bred by exhibitor ; calved October 2, 1881, sire Prince of Wales 20th, 1395, dam Edith 12th by Prince of Wales, 151, gr. d. Edith 4th by Prince of Wales, 151.

B. F. Peck, East Bethany, N. Y. ; second prize, fifteen dollars ; Earl Genesee, bred by Truman Baker, Earlville, N. Y. ; calved May, 1882, sire Willard, 2052, dam Crescent by Litchfield, 789, gr. d. Caroline by Genesee 2nd, 616.

Devon Bull Calves.

A. W. Rumsey, Westfield, N. Y. ; first prize, ten dollars, Daniel, bred by exhibitor ; calved March 21, 1883, sire True Briton, dam Betsy by Bonaparte 2nd, 328, gr. d. Clio by Baltimore 2nd, 268.

Devon Cows over Three Years Old.

Joseph Hilton, New Scotland, N. Y.; first prize, forty dollars; Edith 16th, bred by exhibitor; calved February 9, 1879, sire Crown Prince, 434, dam Edith 12th by Prince of Wales, 151, gr. d. Edith 4th by Prince of Wales, 151.

A. F. Bronson, Vernon, N. Y.; second prize, twenty dollars; Victoria, bred by George Rudd, Guelph, Canada; calved October 10, 1878, sire Prince Albert Victor, 227½, dam Maid of Honor by Hartland, 655, gr. d. Cherry Pie by Young Curly Prince of Wales, 440.

Devon Heifers Two Years Old.

Joseph Hilton, New Scotland, N. Y.; first prize thirty dollars; Lucy Crown, bred by exhibitor; calved March 3, 1881, sire Crown Prince, 434, dam Edith 13th by Prince of Wales, 151, gr. d. Edith 7th by Prince of Wales, 151.

A. F. Bronson, Vernon, N. Y.; second prize, fifteen dollars; Ellie Rhea, bred by George Rudd, Guelph, Canada; calved April 10, 1881, sire The Marquis, 1705, dam Blossom by Dandy, 447, gr. d. Miss Ann by Hartland, 655.

Devon Heifers One Year Old.

A. F. Bronson, Vernon, N. Y.; first prize, twenty dollars; Red Bud bred by exhibitor; calved May 11, 1882, sire Jeddo, 1809, dam Nameless 2nd by Doctor, 462, gr. d. Nameless by Litchfield, 789.

A. F. Bronson, Vernon, N. Y.; second prize, ten dollars; Winchester Girl, bred by exhibitor; calved February 13, 1882, sire Brant, 1344, dam Cherry by Conewango, 428, gr. d. Fruitful by Roscius, 1072.

Devon Heifer Calves.

Joseph Hilton, New Scotland, N. Y.; first prize, ten dollars; Maid of Utica, bred by exhibitor; calved September 25, 1882, sire Prince John H., dam Edith 12th by Prince of Wales, 151, gr. d. Edith 4th by Prince of Wales, 151.

Joseph Hilton, New Scotland, N. Y.; second prize, five dollars; Miss Nancy New bred by exhibitor; calved January 16, 1883, sire Prince of Wales 20th, 1395, dam Edith 14th by Crown Prince, 434, gr. d. Edith 4th by Prince of Wales, 151.

HEREFORDS.

Hereford Herd Prize.

Erastus Corning, Albany, N. Y.; large gold medal.

Bull, Comus, red with white face, bred by P. Turner, Pembridge, Hereford, England; calved July 21, 1872, sire Provost (4067), dam Kathleen by Bolingbroke (1883), gr. d. Redwing by Felix (953).

Cow, Victoria 6th, red with white face, bred by exhibitor; calved June 12, 1874, sire Taurus, dam Victoria 5th by S. Goddard, gr. d. Victoria 4th by Cardinal Wiseman.

Cow, Edna, red with white face, bred by exhibitor; calved February 9, 1879, sire Comus (4457), dam Victoria 6th by Taurus, gr. d. Victoria 5th by S. Goddard.

Cow, Filbert, red with white face, bred by exhibitor; calved February 2, 1879, sire Comus (4457), dam Princess 3rd by Major, gr. d. Princess 2nd by Washington (5134).

Cow, Dorcas 5th, red with white face, bred by Philip Turner, The Leen, Pembridge, Herefordshire, England; calved March 31, 1880, sire Corsair (5271), dam Dorcas 4th by Leominster (3910), gr. d. Dorcas 3rd by Bachelor (2941).

Cow, Duchess 8th, red with white face, bred by John Price, Pembridge, Herefordshire, England; calved June 7, 1880, sire Regulus (4076), dam Duchess 5th by Horace (3877), gr. d. Duchess by Cholstrey (1918).

Hereford Bulls over Three Years Old.

Erastus Corning, Albany, N. Y.; first prize, fifty dollars; Comus, red with white face, bred by P. Turner, Pembridge, Hereford, England; calved July 21, 1872, sire Provost (4067), dam Kathleen by Bolingbroke (1883), gr. d. Redwing by Felix (953).

Hereford Bulls Two Years Old.

John L. Northrop, Westfield, N. Y.; first prize, fifty dollars; Santa Claus, red with white face, bred by H. T. Smith, Berlin Heights, O.; calved December 25, 1880, sire Young American (4231), dam May Queen by Bristol Bill (4374), gr. d. Duchess 2nd by John Bull (3885).

Hereford Bull Calves.

Erastus Corning, Albany, N. Y.; first prize, ten dollars; Kenwood, red with white face, bred by exhibitor; calved December 20, 1882, sire Romeo (6646), dam Comely by Sir Isaac (5598), gr. d. Caroline by Chadnor 2nd (5244).

Hereford Cows over Three Years Old.

Erastus Corning, Albany, N. Y.; first prize, forty dollars; Filbert, red with white face, bred by exhibitor; calved February 2, 1879, sire Comus (4457), dam Princess 3rd by Major, gr. d. Princess 2nd by Washington (5134).

Erastus Corning, Albany, N. Y.; second prize, twenty dollars; Edna, red with white face, bred by exhibitor; calved February 9, 1879, sire Comus (4457), dam Victoria 6th by Taurus, gr. d. Victoria 5th by S. Goddard.

Hereford Heifers One Year Old.

Erastus Corning, Albany, N. Y.; first prize, twenty dollars; Edna 2nd, red with white face, bred by exhibitor; calved December 31, 1881, sire Comus (4457), dam Edna by Comus (4457), gr. d. Victoria 6th by Taurus.

Hereford Heifer Calves.

John L. Northrop, Westfield, N. Y., first prize, ten dollars; Charmer 3rd, red with white face, bred by exhibitor; calved April 7, 1883, sire Thickset (6729), dam Charmer 2nd by Premier (4852), gr. d. Charmer by Dorset (3070).

AYRSHIRES.

Ayrshire Herd Prize.

J. F. Converse, Woodville, N. Y.; large gold medal.

Bull, Major Drummond, mostly red, bred by James Drummond, Montreal, Canada; calved March, 1876, sire Sir Roger, 868, dam Medora, imported by James Drummond.

Cow, Lady Cherry, red, bred by exhibitor; calved June, 1875, sire Woodville Chief, 1542, dam Bessie Bell, imported by exhibitor in 1871.

Cow, Miss Pender, red and white, bred by exhibitor; calved April 13, 1875, sire Woodville Chief, 1542, dam Lady Pender, imported by exhibitor in 1871.

Heifer, Gertie Gillette, red, bred by exhibitor; calved April, 1881, sire Prince Charley, 1689, dam Bessie Bell, imported by exhibitor in 1871.

Heifer, Hattie Hebe, light red and white, bred by exhibitor; calved June, 1881, sire Prince Charley, 1689, dam Dahlia, imported by exhibitor in 1871.

Heifer, Josie Douglass, red and white, bred by exhibitor; calved April, 1881, sire Prince Charley, 1689, dam Dahlia 3rd by Woodville Chief, 1542, gr. d. Dahlia, imported by exhibitor in 1871.

Ayrshire Bulls over Three Years Old.

J. F. Converse, Woodville, N. Y.; first prize, fifty dollars; Major Drummond, mostly red, bred by James Drummond, Montreal, Canada; calved March, 1876, sire Sir Roger, 868, dam Medora, imported by James Drummond.

Burton G. Foster, Vernon, N. Y.; second prize, twenty-five dollars; King of Vernon, dark red and white, bred by Oneida Community, limited, Community, N. Y.; calved March 28, 1880, sire Kilnarnock 25th, 2329, dam Joan, imported January 10, 1879, by P. H. Fowler, Watford, Herts, England.

Ayrshire Bulls Two Years Old.

David Smith, Rome, N. Y.; first prize, forty dollars; Royal Windsor, red and white, bred by G. H. Bell, Rome, N. Y.; calved March 28, 1881, sire Jerry, dam Draxy Miller by 224 Treasurer,* gr. d. Pet by 200 Rob Roy.

Henry Burnett, Logan, N. Y.; second prize, twenty dollars; Major B., bred by C. D. Smead, Logan, N. Y.; calved 1881, sire Jock, dam Dairy Maid by Mikado, 2251, gr. d. Lilly Miller by Lord Cuthbert, LXXVII.

Ayrshire Bulls One Year Old.

George H. Bell, Rome, N. Y.; first prize, thirty dollars, Winfield Boy 3rd, red and white, bred by exhibitor; calved March 17, 1882, sire Winfield Boy, 2610, dam Draxy Miller by 224 Treasurer, gr. d. Pet by 200 Rob Roy.

James M. Thomas, Cuba, N. Y.; second prize, fifteen dollars, Heather Jock 2nd, red and white, bred by exhibitor; calved March 2, 1882, sire 611 Heather Jock, dam Malvina by 487 Stentor 2nd, gr. d. Tibbie by 119 John Gilpin.

Ayrshire Bull Calves.

J. F. Converse, Woodville, N. Y.; first prize, ten dollars; Dandie Douglass, red and white, bred by A. S. Tubbs, Mexico, N. Y.; calved November, 1882, sire Shirley Douglass, 2742, dam Dahlia 2nd by Woodville Chief, 1542, gr. d. Dahlia, imported by exhibitor in 1871.

Ayrshire Cows over Three Years Old.

J. F. Converse, Woodville, N. Y.; first prize, forty dollars; Miss Pender, red and white, bred by exhibitor; calved April 13, 1875, sire Woodville Chief, 1542, dam Lady Pender, imported by exhibitor in 1871.

George H. Bell, Rome, N. Y.; second prize, twenty dollars; Lillie, red and white, bred by S. Dering, Utica, N. Y.; calved April 24, 1878, sire 853 Kilnarnock 2nd, dam Draxy Miller by 224 Treasurer, gr. d. Pet by 200 Rob Roy.

Ayrshire Heifers Two Years Old.

Burton G. Foster, Vernon, N. Y.; first prize, thirty dollars; Belle of Vernon, red and white spotted, bred by exhibitor; calved March 13, 1881, sire Hugo, 2323, dam Pet Brown by 958 The General, gr. d. Pet by 200 Rob Roy.

J. F. Converse, Woodville, N. Y.; second prize, fifteen dollars; Josie Douglass red and white, bred by exhibitor; calved April, 1881, sire Prince Charley, 1689, dam Dahlia 3rd by Woodville Chief, 1542, gr. d. Dahlia, imported by exhibitor in 1871.

Ayrshire Heifers One Year Old.

George H. Bell, Rome, N. Y.; first prize, twenty dollars; Daisy Tresham 2nd, red and white, bred by exhibitor; calved February 21, 1882, sire Winfield Boy, 2610, dam Daisy Tresham by 853 Kilnarnock 2nd, gr. d. Kate Tresham by Norval, 762.

*When the numbers of Ayrshire bulls are printed before the names the reference is to Messrs. Sturtevant's Register.

George Taber, East Aurora, N. Y.; second prize, ten dollars; Altie, brown and white, bred by exhibitor; calved March 3, 1882, sire Premier, 2321, dam Goldena 2nd by Dundee, 1111, gr. d. Goldena by Kilmarnock, 1245.

Ayrshire Heifer Calves.

J. F. Converse, Woodville, N. Y.; first prize, ten dollars; Waiting for an Offer, red and white, bred by exhibitor; calved October, 1882, sire Major Drummond, 2006, dam Rosa 5th by Woodville Chief, 1542, gr. d. Rosa by Kilburn 2nd, 230.

George H. Bell, Rome, N. Y.; second prize, five dollars; Maggie Mitchell 5th, red and white, bred by exhibitor; calved September 27, 1882, sire Winfield Boy, 2610, dam Maggie Mitchell 2nd, by 853 Kilmarnock 2nd, gr. d. Maggie Mitchell by 958 The General.

HOLSTEINS.

Holstein Herd Prize.

Smiths & Powell, Syracuse, N. Y.; large gold medal.

Bull, Netherland Prince, black and white, bred by A. C. Koning, Beemster, North Holland; calved April 1, 1880, sire Schemmel, dam Lady Netherland.

Cow, Ægis, black and white, bred by Gerrit S. Miller, Peterborough, N. Y.; calved October 2, 1873, sire Rip Van Winkle, 35, dam Agoo, imported by Mr. Miller in dam Dowager.

Cow, Netherland Baroness, black and white, bred by Jan van der Meer, Beemster, North Holland; calved March 15, 1877, sire District Bull, dam Gert Met 3rd.

Cow, Netherland Queen, black and white, bred by A. C. Koning, Beemster, North Holland; calved March 26, 1877, sire Schrender, dam Lady Netherland.

Cow, Carlotta, black and white, bred by C. Beets, Purmer, North Holland; calved March, 1879, sire District Bull.

Cow, Clothilde, black and white, bred by J. Stijle, Beemster, North Holland; calved March, 1879, sire Dirk, dam Stijle.

Holstein Bulls over Three Years Old.

F. C. Stevens, Attica, N. Y.; first prize, fifty dollars; De Joustier Stier, black and white, bred by Klaus S. De Yong, Haskerdyken, Friesland; calved March, 1880

Smiths & Powell, Syracuse, N. Y.; second prize, twenty-five dollars, Netherland Prince, black and white, bred by A. C. Koning, Beemster, North Holland; calved April 1, 1880, sire Schemmel, dam Lady Netherland.

Holstein Bulls Two Years Old.

F. C. Stevens, Attica, N. Y.; first prize, forty dollars; Prince of Wayne 2nd, black and white, bred by T. G. Yeomans & Sons, Walworth, N. Y.; calved March 27, 1881, sire Burly, 394, dam Queen of Wayne, imported September 10, 1879, by T. G. Yeomans & Sons, Walworth, N. Y.

Howard G. White, Syracuse, N. Y.; second prize, twenty dollars; Prince Bismarck, black and white, bred by exhibitor; calved February 20, 1881, sire Corugian, 424, dam Vlaaske, imported September 7, 1878, by exhibitor from North Holland.

Holstein Bulls One Year Old.

H. E. Boardman, Rochester, N. Y.; first prize, thirty dollars; Thierry, black and white, bred by G. Wydenes, Jr., Twisk, North Holland; calved March 26, 1882, imported by exhibitor.

Smiths & Powell, Syracuse, N. Y.; second prize, fifteen dollars; Prince Imperial, black and white, bred by exhibitors; calved April 15, 1882, sire Netherland Prince, 716, dam Carlotta, imported by exhibitors.

Holstein Bull Calves.

F C. Stevens, Attica, N. Y.; first prize, ten dollars; Grip, black and white, bred by exhibitor; calved March 9, 1883, sire Damon, 831, dam Francisca 2nd by 5th Prince of Orange, 243, gr. d. Francisca, imported in 1878 by Smiths & Powell, Syracuse, N. Y.

Smiths & Powell, Syracuse, N. Y.; second prize, five dollars; Sir Edward of Aaggie, black and white, bred by exhibitors; calved February 23, 1883, sire Van de Graag (166), dam Aaggie Louise, imported by exhibitors in September, 1882, by Jacob 2nd (56).

Holstein Cows over Three Years Old.

Smiths & Powell, Syracuse, N. Y.; first prize, forty dollars; Clothilde, black and white, bred by J. Stijle, Beemster, North Holland; calved March, 1879, sire Dirk, dam Stijle.

Howard G. White, Syracuse, N. Y.; second prize, twenty dollars; Princess Dagmar, black and white, bred by exhibitor; calved February 11, 1879, imported in dam Vlaaske, September 7, 1878, by exhibitor from North Holland.

Holstein Heifers Two Years Old.

Dallas B. Whipple, Cuba, N. Y.; first prize, thirty dollars; Holland Pride, black and white, bred by M. Noome, Wormer, North Holland; calved April 7, 1881, imported by Smiths & Powell, Syracuse, N. Y., in July, 1881, sire Noome's Bull, dam Potta.

Smiths & Powell, Syracuse, N. Y.; second prize, fifteen dollars; Miss Nanna, black and white, bred by J. Commandeur, Hem, North Holland; calved March 25, 1881, sire District Bull, dam Sijtje.

Holstein Heifers One Year Old.

Smiths & Powell, Syracuse, N. Y.; first prize, twenty dollars; Ægis 6th, black and white, bred by exhibitors; calved October 12, 1881, sire Neptune, 711, dam Ægis 2nd by Uncle Tom, 163, gr. d. Ægis by Rip Van Winkle, 35.

Fitch & Jewett, West Farmington, N. Y.; second prize, ten dollars; Mabel Livingston, black and white, bred by A. Van der Nes, Purmer, North Holland; calved March 20, 1882, imported by Smiths & Powell, Syracuse, N. Y., in August, 1882, sire Bull of A. Van der Nes, dam Sires Boutje.

Holstein Heifer Calves.

Smiths & Powell, Syracuse, N. Y.; first prize, ten dollars; Ægis 9th, black and white, bred by exhibitors; calved November 4, 1882, sire Neptune, 711, dam Ægis by Rip Van Winkle, 35, gr. d. Agoo, imported.

Smiths & Powell, Syracuse, N. Y.; second prize, five dollars; Prunella 2nd, black and white, bred by exhibitors; calved March 1, 1883, sire Doets' Bull in Holland, dam Prunella, imported by exhibitors in August, 1882.

JERSEYS.

Jersey Herd Prize.

S. M. Shoemaker, Stevenson, Md., large gold medal.

Bull, Forget-me-not, dark gray, bred by J. Norman, Trinity, Jersey; calved February 7, 1880, imported August 20 1881, by Cooper, Maddux & Co., Reading, Ohio, sire Farmer's Glory, 5196, dam Erica (F. S. 1946 J. H. B.).

Cow, Oxford Kate, light brown, bred by Francis Le Brocq, St. Peter's Jersey; calved February 20, 1879, sire (Pilot, P. S. 183 J. H. B.) dam Verclut (F. S. 1846 J. H. B.), imported August 20, 1881, by Cooper, Maddux & Co., Reading, Ohio.

Cow, Princess 2nd, light fawn, bred by A. Le Gallais, St. Prelades, Jersey; calved February 22, 1877, sire Khedive (P. S. 103 J. H. B.), dam Princess (F. S. 452 J. H. B.), imported January 8, 1879, by E. P. P. Fowler, Southampton, England.

Cow, Queen of the Farm, dark brown, bred by Charles Holt, Grouville, Jersey; calved 1875, imported August 6, 1879, by William Holt.

Cow, Miss Muffet, dark gray, bred by Cornelius Wellington, East Lexington, Mass.; calved November 9, 1878, sire Major Domo, 2161, dam Ruth, imported March 23, 1869, by William R. Robeson, Boston, Mass.

Heifer, First Butterfly, dark brown, bred by John I. Holly, Plainfield, N. J.; calved June 20, 1882, sire Uproar, 4609, dam Queen of the Farm, imported August 6, 1879, by William Holt.

Jersey Bulls over Three Years Old.

Erastus Corning, Albany, N. Y.; first prize, fifty dollars; Diavolo, gray, fawn and black, bred by exhibitor; calved July 31, 1879, sire Stockwell 3rd, 2770, dam Tranquillity by Stockwell 3rd, 2770, gr. d. Daisy Mortua, imported by exhibitor September 29, 1873.

S. M. Shoemaker, Stevenson, Md., second prize, twenty-five dollars; Forget-me-not, dark gray, bred by J. Norman, Trinity, Jersey; calved February 7, 1880, imported August 20, 1881, by Cooper, Maddux & Co., Reading, Ohio, sire Farmer's Glory, 5196, dam Erica (F. S. 1946 J. H. B.).

Jersey Bulls Two Years Old.

J. B. Bradley, Lyons, N. Y.; first prize, forty dollars; Glaucus, fawn, bred by exhibitor; calved March 10, 1881, sire Troy 5404, dam Maple Dale by Victor, 797, gr. d. Susa, imported July 29, 1868, by Thomas Motley, Boston, Mass.

A. G. Chriswell, Adams' Basin, N. Y.; second prize, twenty dollars; Elegant Boy, fawn, bred by A. G. Barlow & Co., North Ridgeway, N. Y.; calved March 9, 1881, sire Bristol Chief 2nd, 3218, dam Kitty Marcella by Earl of Brookside, 1677, gr. d. Kobe's Marcella by Star Neal, 1495.

Jersey Bulls One Year Old

L. L. Tozier, Batavia, N. Y.; first prize, thirty dollars; Clotaire, black and fawn, bred by Cooper, Maddux & Co., Coopersburgh, Pa.; calved April 19, 1882, sire Royal Oak, 6219, dam Floribundus 2nd, imported August 20, 1881, by Cooper, Maddux & Co.

L. D. Ely, Rochester, N. Y.; second prize, fifteen dollars; Albert Mc., dark squirrel gray, bred by exhibitor; calved May 8, 1882, sire Seneca Chief, 4098, dam Gipsy Maid 3rd by Guido, 3521, gr. d. Gipsy Maid by Pure Gold, 1487.

Jersey Bull Calves.

S. M. Shoemaker, Stevenson, Md.; first prize, ten dollars; Burnside Park, dark gray, bred by exhibitor; calved October 28, 1882, sire Forget-me-not, 6291, dam Owandah by Knave, 1856, gr. d. Dorette by Lord Ogden, 69.

H. Bowen, Medina, N. Y.; second prize, five dollars; Easter Lad, gray and white, bred by James Stillman, Sing Sing, N. Y.; calved October 18, 1882, sire Darlington, 2443, dam Easter Flower by Colt, Jr., 825, gr. d. Couch's Lily by Albert, 44.

Jersey Cows over Three Years Old.

S. M. Shoemaker, Stevenson, Md.; first prize, forty dollars; St. Clementaise, gray fawn, bred by Philip Baudains, St. Clements, Jersey; calved 1871, imported November 20, 1882, by T. S. Cooper, Coopersburgh, Penn.

S. M. Shoemaker, Stevenson, Md.; second prize, twenty dollars; Oxford Kate, light brown, bred by Francis Le Brocq, St. Peters, Jersey; calved February 20, 1879, sire Pilot (P. S. 183, J. H. B.), dam Verclut (F. S. 1846, J. H. B.), imported August 20, 1881, by Cooper, Maddux & Co., Reading, Ohio.

Shepard & Peer, Mt. Morris, N. Y.; highly commended; Mollie Garfield, fawn, bred by C. E. Marsh, Evansville, Ind.; calved April, 1876, sire Bel Caliph, 1432, dam Maple Dale by Victor, 797, gr. d. Susa, imported July 29, 1863, by Thomas Motley, Boston, Mass.

L. L. Tozier, Batavia, N. Y.; highly commended; Floribundus 2nd, fawn and white, bred by J. Le Brocq, St. Mary's, Jersey; calved February, 1879, imported August 28, 1881, by Cooper, Maddux & Co., Coopersburgh, Penn., sire Victor (P. S. 148, J. H. B.), dam Floribundus (P. S. 659, J. H. B.).

Jersey Heifers Two Years Old.

H. W. Skerritt, Deansville, N. Y.; first prize, thirty dollars; Belle Steuben, orange fawn, bred by Dr. J. C. Gallup, Clinton, N. Y.; calved July 18, 1881, sire Steuben, 4751, dam Elsie Dinsmore by Jason of Deerfoot, 1636, gr. d. Hattie Parks by Duke of Framingham, 1521.

Shepard & Peer, Mt. Morris, N. Y.; second prize, fifteen dollars; Bessie Flash, cream fawn, bred by John McClennan, Woodstock, Conn.; calved February 25, 1881, sire Flash, 2532, dam Flash by Hughes, 954, gr. d. Lady Dash by Tom Dasher, 420.

Jersey Heifers One Year Old.

S. M. Shoemaker, Stevenson, Md.; first prize, twenty dollars; First Butterfly, dark brown, bred by John I. Holly, Plainfield, N. J.; calved June 20, 1882, sire Uproar, 4609, dam Queen of the Farm, imported August 6, 1879, by William Holt.

J. B. Bradley, Lyons, N. Y.; second prize, ten dollars; Notice, fawn, bred by exhibitor; calved March 10, 1882, sire Bel Caliph, 1432, dam Maple Dale by Victor, 797, gr. d. Susa, imported July 29, 1863, by Thomas Motley, Boston, Mass.

Jersey Heifer Calves.

H. Bowen, Medina, N. Y.; first prize, ten dollars; Dido's Duke's Daughter, dark fawn, bred by Edwin Thorne, Millbrook, N. Y.; calved October 24, 1882, sire Dido's Duke, 4678, dam Little Buttercup of Ipswich by Duke, Jr., 2465 gr. d. Maud Duchess by Royal Duke of Ipswich, 1590.

L. L. Cramer, Macedon, N. Y.; second prize, five dollars; Maud Alexis, light fawn, bred by G. P. Lapham, Macedon, N. Y.; calved April 10, 1883, sire Troy, 5404, dam Belle of Wayne by Sir Farmington, 3316, gr. d. Bell of Canandaigua by Croton, 2348.

GUERNSEYS.

Guernsey Bulls Over Three Years Old.

B. F. Nutting, Woodville, N. Y.; first prize, fifty dollars; Og, fawn and white, bred by E. Norton, Farmington, Conn.; calved April, 1873, sire Malbrook, 23, dam Princess, bred by M. Langlois, Guernsey, and imported April, 1876, by M. C. Weld, Closter, N. J.

Guernsey Bulls Two Years Old.

A. S. Shimer, Redington, Pa.; first prize, forty dollars; King of Central Fruit and Stock Farm, fawn and white, bred by James Fuller, Catisauqua, Penn.; calved December 7, 1880, sire Fair Lad, 71, dam Rose Martin, imported, December, 1877, by E. P. P. Fowler, Southampton, England.

Howard G. White, Syracuse, N. Y.; second prize, twenty dollars; Duke of Fernwood, light orange fawn and white, bred by L. W. Ledyard, Cazenovia, N. Y.; calved July 31, 1881, sire Fernwood, 190, dam Fernwood Fancy, imported by C. M. Beach, Hartford, Conn.

Guernsey Bulls One Year Old.

A. S. Shimer, Redington, Penn.; first prize, thirty dollars; General of Central Fruit and Stock Farm, fawn and white, bred by James Fuller, Catisauqua,

Penn. ; calved April, 1882, sire Fair Lad 2nd, 75, dam Lily 3rd by Fair Lad, 71, gr. d. Lily, imported October, 1872, by E. P. P. Fowler, Southampton, England.

Guernsey Cows over Three Years Old.

Howard G. White, Syracuse, N. Y. ; first prize, forty dollars ; Olivette, orange fawn and white, bred by Augustus Ward, Farmington, Conn. ; calved March 6, 1880, sire Dom Pedro, 52, dam La Gelé, imported in April, 1876, by M. C. Weld, New York.

Guernsey Heifers Two Years Old.

Howard G. White, Syracuse, N. Y. ; first prize, thirty dollars ; Serpolette, orange fawn and white, bred by Augustus Ward, Farmington, Conn. ; calved March 19, 1881, sire Dom Pedro, 52, dam La Gelé, imported in April, 1876, by M. C. Weld, New York.

Guernsey Heifers One Year Old.

B. F. Nutting, Woodville, N. Y. ; first prize, twenty dollars ; Beauty of Lakeside, fawn and white, bred by Thomas M. Harvey & Son, West Grove, Penn. ; calved —, sire Sir Champion, 38, dam Carrie of Green Bank by Pilgrim, 14, gr. d. Carrie by Robin Hood, 5.

Guernsey Heifer Calves.

A. S. Shimer, Redington, Penn. ; first prize, ten dollars ; Apple Peel, fawn and white, bred by exhibitor ; calved January 1, 1883, sire King of Central Fruit and Stock Farm, 304, dam Mertie by Napoleon, 58, gr. d. Nancy 2nd by Sir Champion, 38.

MILCH COWS.

Milch Cows of any Breed.

Smiths & Powell, Syracuse, N. Y. ; first prize, thirty dollars ; Netherland Baroness (Holstein), black and white, bred by Jan van der Meer, Beemster, North Holland, calved March 15, 1877, sire District Bull, dam Gert Met 3rd.

OXEN, STEERS AND FAT CATTLE.

Fat Oxen over Four Years Old.

George Ayrault, Poughkeepsie, N. Y. ; first prize, thirty dollars ; red and white, four years.

M. B. Ritter, Waterloo, N. Y. ; second prize, fifteen dollars ; red and white, bred by exhibitor ; calved March 20, 1879, sire Prince of the River, 12677 (short-horn), dam three-fourths shorthorn.

Fat Steers under Four Years Old.

George Ayrault, Jr., Poughkeepsie, N. Y. ; first prize, thirty dollars ; red and white, three years old.

George Ayrault, Poughkeepsie, N. Y. ; second prize, fifteen dollars ; roan, three years.

Fat Cows over Four Years Old.

Erastus Corning, Albany, N. Y. ; first prize, thirty dollars ; Topsy Turvey (Hereford), red with white face, bred by exhibitor ; calved March 13, 1877, sire Comus (4457), dam Topsy by Taurus, gr. d. Marchioness 2nd by Major.

George Ayrault, Jr., Poughkeepsie, N. Y. ; second prize, fifteen dollars ; red and white, four years.

Fat Heifers under Four Years Old.

George Ayrault, Poughkeepsie, N. Y.; first prize, thirty dollars ; red and white, three years.

W. C. Albertson, North Rush, N. Y.; second prize, fifteen dollars, (shorthorn), red and white, bred by exhibitor ; calved October 7, 1879, sire Geneva Duke, 11209, dam Buttercup 3rd by Virgil, 9271, gr. d. Buttercup 2nd by Victor, 11104.

HORSES.

BREEDING AND GROWING STOCK.

Special Prize for the Best Draught or Agricultural Stallion, of any Age or Breed.

Christian Sitterly, Palatine, N. Y.; special prize, one hundred dollars, MacHenry dark bay, 16.2. seven years, bred by exhibitor, sire Clyde, dam Dolly by Boshart's Messenger, gr. d. by Rysdyk's Hambletonian.

CLYDESDALES AND THEIR CROSSES.

Stallions over Four Years Old.

Christian Sitterly, Palatine, N. Y.; first prize, fifty dollars, MacHenry ; dark bay, 16.2, seven years, bred by exhibitor, sire Clyde, dam Dolly by Boshart's Messenger, gr. d. by Rysdyk's Hambletonian.

Orrin W. Todd, Greece, N. Y.; second prize, twenty-five dollars ; Young Marquis 2nd, chestnut, 16.2, eight years, sire Young Marquis, dam by Masterman, gr. d. by Jack's Alive.

Stallions Three Years Old.

Smiths & Powell, Syracuse, N. Y.; first prize, forty dollars ; Sir Robert, dark bay sire Sir Robert, 17 (1520), dam Fairfield Nelly.

Stallions Two Years Old.

John Bennett, North Parma, N. Y.; first prize, thirty dollars ; Lord Stanley 2nd, bay, 15.2 ; foaled August 31, 1881, bred by Powell Bros., Springboro, Penn., sire Lord Stanley, dam Edna by Joe the Banker, gr. d. by A One.

Smiths & Powell, Syracuse, N. Y.; second prize, fifteen dollars ; Colossus, bay, sire Lochnager, 753 (1469), dam Bess by Young Marquis, 293, gr. d. by Hard Fortune.

Mares over Four Years Old.

Smiths & Powell, Syracuse, N. Y.; first prize, fifty dollars ; Jean, bay, six years, sire Scottish Lad, 846, dam by Tintock, gr. d. by Admiral, 4.

Leyman S. Wansey, Spencerport, N. Y.; second prize, twenty-five dollars ; Mary McNall, bay, 16, seven years, bred by Washington McNall, Port Hope, Canada ; sire Young Canada, dam by imported Comet.

Fillies Three Years Old.

Smiths & Powell, Syracuse, N. Y.; first prize, forty dollars ; Fanny Taylor, bay, sire Highland Chief, 226 (382), dam by Drayman, gr. d. by Hard Fortune.

Fillies Two Years Old.

Smiths & Powell, Syracuse, N. Y.; first prize, thirty dollars ; Nell Laurie, bay, sire Young Broomfield, 73, dam by Sir William Wallace, gr. d. by London Tom.

Hiram Babcock, Auburn, N. Y.; second prize, fifteen dollars ; Lady Belle, gray, sire Duke of Homer (Percheron), dam by Scotland's Glory (Clydesdale).

Fillies One Year Old.

Smiths & Powell, Syracuse, N. Y.; first prize, twenty dollars; Jessamine, light bay, sire The Brown Glancer, 222 (1322), dam Black Madam.

C. P. Whitney, Orleans, N. Y.; second prize, ten dollars; Beaute, dark bay, bred by exhibitor; sire Defiance, dam Flora by Prince of Wales, imported.

PERCHERONS AND THEIR CROSSES.

Stallions over Four Years Old.

Howard G. White, Syracuse, N. Y.; first prize, fifty dollars; Raspail, gray, 17.1, eight years, bred by P. Sagoy, Nogent-le-Rotrou, France, imported by exhibitor; sire Pierrot, dam Couronne.

Houghton Farm, Mountainville, N. Y.; second prize, twenty-five dollars; Bayard, dapple gray, 17.3, five years, imported in August, 1881.

Stallions Three Years Old.

Henry Tubbs, Osceola, Penn., first prize, forty dollars; Dandy, dark gray, 16.2.

H. Billings, East Kendall, N. Y.; second prize, twenty dollars; Ravenna, black, 16.1.

Stallions Two Years Old.

E. A. Cottrell, Andover, N. Y.; first prize, thirty dollars; Phillisides, dark gray, 15.2, bred by M. Perriott, Nogent-le-Rotrou, France, sire Narbonne.

George H. Wescott, Savannah, N. Y.; second prize, fifteen dollars; Coco, dark gray, 16, bred by James Early, Savannah, N. Y., sire Coco, imported by M. W. Dunham, Wayne, Ill., dam by Louis Napoleon.

Stallions One Year Old.

Owen Baker, Belmont, N. Y.; first prize, twenty dollars; Frank, bay, sire Cottrell's Napier.

Henry Tubbs, Osceola, Penn., second prize, ten dollars; gray, sire Valient.

Mares over Four Years Old.

Howard G. White, Syracuse, N. Y.; first prize, fifty dollars; Rustique, gray, 16.2, six years, bred by H. Guibert, Nogent-le-Rotrou, France, imported by exhibitor; sire Margot, dam Rustique.

John W. Akin, Scipio, N. Y.; second prize, twenty-five dollars; Molly, gray, 16, five years, imported by exhibitor in August, 1883.

Fillies Three Years Old.

John W. Akin, Scipio, N. Y.; first prize, forty dollars; Fanny R., dark gray, 16.2.

Fillies Two Years Old.

F. B. Redfield, Batavia, N. Y.; first prize, thirty dollars; Nathalie, dark gray, imported by M. W. Dunham, Wayne, Ill.

John W. Akin, Scipio, N. Y.; second prize, fifteen dollars; Jennie, gray, 15.3, sire Akin's Duke of Homer, dam by Norman Leslie, gr. d. by Louis Phillippe.

Fillies One Year Old.

Thomas Burns, Pittsford, N. Y.; first prize, twenty dollars; Perchy, bay, bred by exhibitor; foaled May 17, 1882, sire Grenadier.

E. A. Cottrell, Andover, N. Y. ; second prize, ten dollars; Mollie, bay, sire Napier, dam by Young Ethan Allen, gr. d. by Bay Norman.

THOROUGHBREDS AND THEIR CROSSES.

Including Messengers of all branches, Clays, Morgans, Coachers and all families founded upon, or more or less improved by, English or Eastern blood.

Special Prize for the Best Stallion of any Age.

C. J. Hamlin, Willink, N. Y. ; special prize, one hundred and fifty dollars; Mambrino King, chestnut, 15.3, 11 years, sire Mambrino Patchen, dam by Alexander's Edwin Forrest, gr. d. by Duroc, gr. gr. d. by imported Messenger

Stallions over Five Years Old.

C. J. Hamlin, Willink, N. Y. ; first prize, seventy dollars; Mambrino King, chestnut, 15.3, 11 years, sire Mambrino Patchen, dam by Alexander's Edwin Forrest, gr. d. by Duroc, gr. gr. d. by imported Messenger.

N. B. Mann, Mannsville, N. Y. ; second prize, thirty-five dollars; William Rysdyk, bay, 15.3, 7 years, bred by Captain Tyler, Oswego, N. Y., sire David Bonner, dam Babe by Tippoo.

Stallions Four Years Old.

N. P. Pond, Rochester, N. Y. ; first prize, sixty dollars ; Thornwood, bay, 15.3, bred by H. M. Bugher, Woodland Farm, Glendale, Ohio; sire Woodlawn (son of Hero of Thorndale), dam Maggie Strader, by Mambrino Clay, gr. d. Susan Loder by Daniel Boone.

Henry Pulis, West Greece, N. Y. ; second prize, thirty dollars ; Sunrise, bay, 16.1, bred by J. D. Worden, North Parma, N. Y., foaled June 24, 1879, sire Monroe Chief, dam by Black Hawk (Gardner's).

Stallions Three Years Old.

Nathan Case, Egypt, N. Y. ; first prize, fifty dollars ; Young Tremont, bay, 16.2, bred by exhibitor; sire Little's Tremont (by Alexander's Belmont), dam by Bay Eclipse, gr. d. by Henry, gr. gr. d. by Abuluca.

Elijah Lake, Ira, N. Y. ; second prize, twenty-five dollars ; bay, 15.

Stallions Two Years Old.

C. J. Hamlin, Willink, N. Y. ; first prize, forty dollars; Blaine, bay, 14.3, sire Almont, Jr., dam by Hamlin's Patchen, gr. d. by Dictator.

F. B. Redfield, Batavia, N. Y. ; second prize, twenty dollars ; Decebalus, brown or bay, bred by exhibitor ; sire Harold, dam Dacia by Woodford Mambrino, gr. d. Dahlia by Pilot, Jr., gr. gr. d. Madam Dudley.

Stallions One Year Old.

Smiths & Powell, Syracuse, N. Y. ; first prize, thirty dollars ; Autocrat, bay, sire Havoc, dam Onondaga Girl by Reveler, gr. d. Lou by Centreville.

C. J. Hamlin, Willink, N. Y. ; second prize, fifteen dollars, W. H. Nichols, sire Blackwood Chief, dam by Mambrino Patchen, gr. d. by Tom Crowder.

Mares over Five Years Old.

C. J. Hamlin, Willink, N. Y. ; first prize, sixty dollars ; chestnut, 16, five years.

Charles Coolidge, Phelps, N. Y. ; second prize, thirty dollars ; brown, 16.2, five years.

Fillies Four Years Old.

C. J. Hamlin, Willink, N. Y.; first prize, fifty dollars; Belle H., dark bay, 15.2½, sire Almont, Jr., dam by Hamlin's Patchen, gr. d. by a son of Hill's Black Hawk.

Fitch & Jewett, West Farmington, N. Y.; second prize, twenty-five dollars; Gabelle, black, 15.2, bred by Smiths & Powell, Syracuse, N. Y., sire Reveller, dam Eva by Satellite, gr. d. Clark mare by a son of Consternation.

Fillies Three Years Old.

Will Andrews, Batavia, N. Y.; first prize, forty dollars; Mollie G., bay; foaled June 6, 1880, sire Blue Danube, dam by Jim Lewis (son of Van De Bogart's Henry Clay), gr. d. by Young Moscow (son of Mazeppa).

C. J. Hamlin, Willink, N. Y.; second prize, twenty dollars; bay, 15.2½, sire Almont, Jr., dam by Hamlin's Patchen, gr. d. by Rysdyk's Hambletonian.

Fillies Two Years Old.

C. J. Hamlin, Willink, N. Y.; first prize, thirty dollars, Bessie H., bay, 15, sire Almont, Jr., dam by Mambrino Patchen, gr. d. by Tom Crowder.

S. C. Wells, Le Roy, N. Y.; second prize, fifteen dollars; Maud Gothard, bay, bred by exhibitor; sire St. Gothard, dam Ingelow by Rolla, gr. d. Mineola by Edward Everett.

Fillies One Year Old.

C. J. Hamlin, Willink, N. Y.; first prize, twenty dollars; Silk, bay, sire Alcantara (son of George Wilkes), dam Gerty Smith by Mambrino Patchen, gr. d. Dora by Lancaster (son of Glencoe).

Isaac S. Wells, Egypt, N. Y.; second prize, ten dollars; Halcie B., bay, bred by exhibitor; sire Burlew's Charlie B., dam Morgan Queen.

SHETLAND PONIES.

Stallions over Two Years Old.

J. F. Converse, Woodville, N. Y.; first prize, twenty dollars; Dexter, black, 10, ten years.

Stallions under Two Years.

J. F. Converse, Woodville, N. Y.; first prize, twenty dollars; Fearless, black, 9.2, eighteen months.

Mares over Two Years Old.

J. F. Converse, Woodville, N. Y.; first prize, twenty dollars; Lulu, black, 10, six years.

HARNESS AND SADDLE HORSES.

Draught Pairs.

C. Eberenz, Wellsboro, Penn.; first prize, fifty dollars; bay, 16, three and four years, sire Valiant, dam Molly.

Isaac C. Otis, Jordan, N. Y.; second prize, twenty-five dollars; dapple gray, 16.2, seven and eight years.

Coach Pairs.

James B. Shearer, Pittsford, N. Y.; first prize, fifty dollars; dark bay, 16.1, five years.

A. M. Parker, Trenton, N. Y.; second prize, twenty-five dollars; brown geldings, 15.3½, six years.

Phaeton Pairs.

Peter Sanderson, Rochester, N. Y.; first prize, fifty dollars; bay geldings, 15.3, five and six years.

R. P. Hubbard, Chili, N. Y. ; second prize, twenty-five dollars ; black fillies, 15.1, three years, sire Montgomery Royal George.

Coupe Horses.

A. W. Smith, Cuba, N. Y. ; first prize, thirty dollars ; Paul, brown gelding, 16.2, bred by exhibitor ; foaled June 15, 1878, sire Gibson, dam by Wood's Hambletonian.

Thomas Leighton, Rochester, N. Y. ; second prize, fifteen dollars ; chestnut gelding, six years.

Roadsters.

Wolcott Van De Bogart, Batavia, N. Y. ; first prize, thirty dollars ; Ray Dahna, bay, sire Blue Danube, dam by Ray Miller, gr. d. by Bay Hambletonian.

Ensign & Brown, Jeddo, N. Y. ; second prize, fifteen dollars ; bay mare, 15, seven years.

Saddle Horses.

A. W. Smith, Cuba, N. Y. ; first prize, thirty dollars, Jeff Davis, brown gelding, 15, bred by exhibitor, foaled May 21, 1877 ; sire Jeff Davis, dam by Wood's Hambletonian.

Peter Sanderson, Rochester, N. Y. ; second prize, fifteen dollars ; bay, 15.2, five years.

Ponies (under 13 hands) Broken to Harness or Saddle.

H. R. Nettleton, Rochester, N. Y. ; first prize, twenty dollars ; bay and white spotted, 13, eight years.

W. C. Albertson, North Rush, N. Y. ; second prize, ten dollars ; Modoc, chestnut, 13, seven years.

JACKS AND MULES.

JACKS.

H. Burnett, Logan, N. Y. ; first prize, thirty dollars ; Don Juan, dark brown, 14, seven years.

John Wellman, Parma, N. Y. ; second prize, fifteen dollars ; grayish brown, 13.2, ten years.

SHEEP, SWINE AND POULTRY.

LONG WOOLED SHEEP — LEICESTERS.

Rams over Two Years Old.

William S. Moore, Mt. Upton, N. Y. ; first prize, twenty dollars ; bred by John Clark.

D. C. Kurtz, Pittsford, N. Y. ; second prize, ten dollars.

Rams One Year Old.

George H. Middleton, West Webster, N. Y. ; first prize, twenty dollars ; bred by exhibitor.

W. S. Moore, Mt. Upton, N. Y. ; second prize, ten dollars ; bred by exhibitor.

Ram Lambs.

D. C. Kurtz, Pittsford, N. Y. ; first prize, ten dollars.

Geo. H. Middleton, West Webster, N. Y. ; second prize, five dollars.

Pens of Ewes over Two Years Old.

Geo. H. Middleton, West Webster, N. Y. ; first prize, twenty dollars.

D. C. Kurtz, Pittsford, N. Y. ; second prize, ten dollars.

Pens of Yearling Ewes.

D. C. Kurtz, Pittsford, N. Y.; first prize, twenty dollars.

George H. Middleton, West Webster, N. Y.; second prize, ten dollars.

Pens of Ewe Lambs.

George H. Middleton, West Webster, N. Y.; first prize, ten dollars.

COTSWOLDS.

Rams over Two Years Old.

George Chick, Attica, N. Y.; first prize, twenty dollars, bred by James Russell.

George Ingersoll, Charleston, N. Y.; second prize, ten dollars, imported.

Rams One Year Old.

George Ingersoll, Charleston, N. Y.; first prize, twenty dollars, bred by exhibitor.

Peter D. Hulst, East Penfield, N. Y.; second prize, ten dollars, bred by James Russell, Canada.

Ram Lambs.

Aaron Bordwell, Corfu, N. Y.; first prize, ten dollars, Dido, bred by exhibitor.

George Chick, Attica, N. Y.; second prize, five dollars, bred by exhibitor.

Pens of Ewes over Two Years Old.

George Ingersoll, Charleston, N. Y.; first prize, twenty dollars, bred by exhibitor.

George Chick, Attica, N. Y.; second prize, ten dollars, bred by James Russell.

Pens of Yearling Ewes.

Shepard & Peer, Mt. Morris, N. Y.; first prize, twenty dollars, bred by John Gillett, England.

George Ingersoll, Charleston, N. Y.; second prize, ten dollars, bred by exhibitor.

Pens of Ewe Lambs.

Shepard & Peer, Mt. Morris, N. Y.; first prize, ten dollars, bred by F. S. Peer East Palmyra, N. Y.

Aaron Bordwell, Corfu, N. Y.; second prize, five dollars, bred by exhibitor.

LINCOLNS.

Rams over Two Years Old.

G. W. & O. Johnson, Geneva, N. Y.; first prize, twenty dollars, bred by exhibitors.

Rams One Year Old.

G. W. & O. Johnson, Geneva, N. Y.; first prize, twenty dollars, bred by Geary & Bro.

Ram Lambs.

G. W. & O. Johnson, Geneva, N. Y.; first prize, ten dollars, bred by exhibitors.

Pens of Ewes Two Years Old.

G. W. & O. Johnson, Geneva, N. Y.; first prize, twenty dollars, bred by Geary & Bro.

Pens of Yearling Ewes.

G. W. & O. Johnson, Geneva, N. Y.; first prize, twenty dollars, bred by Geary & Bro.

Pens of Ewe Lambs.

G. W. & O. Johnson, Geneva, N. Y.; first prize, ten dollars, bred by exhibitors.

MIDDLE-WOOLED SHEEP — SOUTHDOWNS.

Rams over Two Years Old.

John Hobart Warren, Hoosick Falls, N. Y.; first prize, twenty dollars, bred by Lord Walsingham, England.

John Hobart Warren, Hoosick Falls, N. Y.; second prize, ten dollars, bred by exhibitor.

Rams One Year Old.

Daniel B. Haight, Dover Plains, N. Y.; first prize, twenty dollars, bred by Lord Walsingham, England.

John Hobart Warren, Hoosick Falls, N. Y.; second prize, ten dollars, bred by exhibitor.

Ram Lambs.

Daniel B. Haight, Dover Plains, N. Y.; first prize, ten dollars, bred by exhibitor.

George H. Bell, Rome, N. Y.; second prize, five dollars, bred by exhibitor.

Pens of Ewes over Two Years Old.

Daniel B. Haight, Dover Plains, N. Y.; first prize, twenty dollars, bred by exhibitor.

John Hobart Warren, Hoosick Falls, N. Y.; second prize, ten dollars, bred by exhibitor.

Pens of Yearling Ewes.

Daniel B. Haight, Dover Plains, N. Y.; first prize, twenty dollars, bred by Lord Walsingham, England.

John Hobart Warren, Hoosick Falls, N. Y.; second prize, ten dollars, bred by exhibitor.

Pens of Ewe Lambs.

Daniel B. Haight, Dover Plains, N. Y., first prize, ten dollars; bred by exhibitor.

John Hobart Warren, Hoosick Falls, N. Y., second prize, five dollars; bred by exhibitor.

SHROPHIRES.

Rams over Two Years Old.

George Ingersoll, Charleston, N. Y., first prize, twenty dollars; imported.

C. D. Smead, Logan, N. Y., second prize, ten dollars; Royal Gem, bred by Sir H. Alsopp, sire Baron Penderford.

Ram Lambs.

George Ingersoll, Charleston, N. Y.; first prize, ten dollars.

C. D. Smead, Logan, N. Y.; second prize, five dollars; Model, bred by exhibitor, sire Caractacus.

Pens of Ewes over Two Years Old.

C. D. Smead, Logan, N. Y.; first prize, twenty dollars; Lady Clermont, bred by Wm. M. Miller, Ontario, Can.; Fashion, bred by Richard Thomas, Barchurch, England; Beauty, bred by Mr. Lovett, Low Hill, England.

George Ingersoll, Charleston, N. Y.; second prize, ten dollars, imported.

Pens of Yearling Ewes.

George Ingersoll, Charleston, N. Y.; first prize, twenty dollars, imported.

C. D. Smead, Logan, N. Y.; second prize, ten dollars; Maggie Miller, bred by Wm. M. Miller, Ontario; Orietta and Cora, bred by John Evans, Affington, England; sire Royal Taunton.

Pens of Ewe Lambs.

George Ingersoll, Charleston, N. Y.; first prize, ten dollars, bred by exhibitor.

HAMPSHIRE.

Rams over Two Years Old.

Henry Metcalf, Canandaigua, N. Y.; first prize, twenty dollars, bred by exhibitor.

Henry Metcalf, Canandaigua, N. Y.; second prize, ten dollars, bred by exhibitor.

Rams One Year Old.

Henry Metcalf, Canandaigua, N. Y.; first prize, twenty dollars, bred by exhibitor.

E. M. Benham, Hopewell Centre, N. Y.; second prize, ten dollars.

Ram Lambs.

E. M. Benham, Hopewell Centre, N. Y.; first prize, ten dollars.

Henry Metcalf, Canandaigua, N. Y.; second prize, five dollars, bred by exhibitor.

Pens of Ewes over Two Years Old.

Henry Metcalf, Canandaigua, N. Y.; first prize, twenty dollars, bred by exhibitor.

E. M. Benham, Hopewell Centre, N. Y.; second prize, ten dollars.

Pens of Yearling Ewes.

Henry Metcalf, Canandaigua, N. Y.; first prize, twenty dollars, bred by exhibitor.

Pens of Ewe Lambs.

Henry Metcalf, Canandaigua, N. Y.; first prize, ten dollars.

Henry Metcalf, Canandaigua, N. Y.; second prize, five dollars.

OXFORDSHIRE.

Ram Lambs.

Aaron Bordwell, Corfu, N. Y.; first prize, ten dollars; Snowball, bred by J. C. Ross.

FINE-WOOLED SHEEP.

MERINOS BRED FOR FINENESS OF WOOL.

Rams over Three Years Old.

C. D. & C. Kenyon, Centre White Creek, N. Y.; first prize, twenty dollars, bred by Carl Heyne.

Rams One Year Old.

Warren J. Tyler & Son, South Byron, N. Y.; first prize, twenty dollars.

M. F. Gibbs, Livonia, N. Y. ; second prize, ten dollars, bred by E. L. Gage.

Ram Lambs.

C. D. & C. Kenyon, Centre White Creek, N. Y. ; first prize, ten dollars.

Warren J. Tyler & Son, South Byron, N. Y. ; second prize, five dollars.

Pens of Ewes over Three Years Old.

C. D. & C. Kenyon, Centre White Creek, N. Y. ; first prize, twenty dollars, bred by Carl Heyne.

Warren J. Tyler & Son, South Byron, N. Y. ; second prize, ten dollars.

Pens of Ewes Two Years Old.

Warren J. Tyler & Son, South Byron, N. Y. ; first prize, twenty dollars.

C. D. & C. Kenyon, Centre White Creek, N. Y. ; second prize, ten dollars, bred by Carl Heyne.

Pens of Yearling Ewes.

D. W. Percy, North Hoosick, N. Y. ; first prize, twenty dollars, bred by exhibitor.

Warren J. Tyler & Son, South Byron, N. Y. ; second prize, ten dollars.

Pens of Ewe Lambs.

Warren J. Tyler & Son, South Byron, N. Y. ; first prize, ten dollars.

C. D. & C. Kenyon, Centre White Creek, N. Y. ; second prize, five dollars, bred by exhibitors.

MERINOS BRED FOR WEIGHT OF FLEECE.

Rams over Three Years Old.

Ray Bros., Honeoye, N. Y. ; first prize, twenty dollars.

John S. Beecher, Livonia, N. Y. ; second prize, ten dollars, Ruby's Boy, bred by J. S. Beecher.

Rams Two Years Old.

Galusha & Burgess, North Hoosick, N. Y. ; first prize, twenty dollars, Barnum, bred by D. B. Galusha.

Ray Bros., Honeoye, N. Y. ; second prize, ten dollars.

Rams One Year Old.

Beecher & Bennett, Livonia, N. Y. ; first prize, twenty dollars, Eldorado, bred by F. D. Barton, Vergennes, Vt.

John S. Beecher, Livonia, N. Y. ; second prize, ten dollars, bred by exhibitor.

Ram Lambs.

Ray Bros., Honeoye, N. Y. ; first prize, ten dollars.

Sylvester B. James, Hoosick, N. Y. ; second prize, five dollars, bred by exhibitor.

Pens of Ewes over Three Years Old.

Ray Bros., Honeoye, N. Y. ; first prize, twenty dollars.

C. D. & C. Kenyon, Centre White Creek, N. Y. ; second prize, ten dollars, bred by exhibitors.

Pens of Ewes Two Years Old.

Ray Bros., Honeoye, N. Y. ; first prize, twenty dollars.

John S. Beecher, Livonia, N. Y. ; second prize, ten dollars, bred by exhibitor.

Pens of Yearling Ewes.

Ray Bros., Honeoye, N. Y. ; first prize, twenty dollars.

P. & G. F. Martin, Rush, N. Y. ; second prize, ten dollars.

Pens of Ewe Lambs.

Ray Bros., Honeoye, N. Y. ; first prize, ten dollars.

Sylvester B. James, Hoosick, N. Y. ; second prize, five dollars, bred by exhibitor.

MERINOS BRED FOR LENGTH OF STAPLE.

Rams over Three Years Old.

Howard Tryon, Fleming, N. Y. ; first prize, twenty dollars, bred by L. P. Clark.

W. S. Moore, Mount Upton, N. Y. ; second prize, ten dollars, three years, bred by H. O. Moore.

Rams Two Years Old.

C. D. & C. Kenyon, Centre White Creek, N. Y. ; first prize, twenty dollars, bred by exhibitors.

Rams One Year Old.

M. F. Gibbs, Livonia, N. Y. ; first prize, twenty dollars, bred by E. L. Gage.

Warren J. Tyler & Son, South Byron, N. Y. ; second prize, ten dollars.

Ram Lambs.

John S. Beecher, Livonia, N. Y. ; first prize, ten dollars.

Warren J. Tyler & Son, South Byron, N. Y. ; second prize, five dollars.

Pens of Ewes over Three Years Old.

Warren J. Tyler & Son, South Byron, N. Y. ; first prize, twenty dollars.

W. S. Moore, Mount Upton, N. Y. ; second prize, ten dollars, bred by H. O. Moore.

Pens of Ewes Two Years Old.

Charles H. Richmond, Livonia Station, N. Y. : first prize, twenty dollars, bred by E. L. Gage.

Roscoe C. James, Eagle Bridge, N. Y. ; second prize, ten dollars, bred by J. L. Quackenbush.

Pens of Yearling Ewes.

Charles H. Richmond, Livonia Station, N. Y. ; first prize, twenty dollars, bred by E. L. Gage.

Pierce & Fellows, Spencerport, N. Y. ; second prize, ten dollars, bred by exhibitors.

Pens of Ewe Lambs.

Roscoe C. James, Eagle Bridge, N. Y. ; first prize, ten dollars, bred by exhibitor.

Sylvester B. James, Hoosick, N. Y. ; second prize, five dollars, bred by exhibitor.

SWINE.

LARGE WHITE BREED.

Herd Prize.

E. J. Clark, Belleville, N. Y.; gold medal.

Boars over One Year Old.

E. J. Clark, Belleville, N. Y.; first prize, twenty dollars.

F. H. Britt, Ridgeway, N. Y.; second prize, ten dollars, Orleans.

Boars under One Year Old.

T. R. Proctor, Utica, N. Y.; first prize, twenty dollars; Cheshire King, bred by exhibitor.

E. J. Clark, Belleville, N. Y.; second prize, ten dollars.

Sows over One Year Old.

T. R. Proctor, Utica, N. Y.; first prize, twenty dollars; Lady Cheshire, bred by J. C. Eldred, Newport, N. Y.

E. J. Clark, Belleville, N. Y.; second prize, ten dollars.

Sows under One Year Old.

A. L. Thomas, Cuba, N. Y.; first prize, twenty dollars, bred by exhibitor.

Thomas Brothers, Franklinville, N. Y.; second prize, ten dollars.

POLAND CHINA.

Herd Prize.

George H. Bell, Rome, N. Y.; gold medal; boar, Roman Chief; sows, Bell's Favorite, Little Queen, Queen of Rome 2nd.

Boars over One Year Old.

George H. Bell, Rome, N. Y.; first prize, twenty dollars; Roman Chief, bred by exhibitor.

David Smith, Rome, N. Y.; second prize, ten dollars; Warwick, bred by exhibitor; sire Royal George, dam Maggie.

Boars under Year Old.

George H. Bell, Rome, N. Y.; first prize, twenty dollars; Major B., bred by exhibitor.

David Smith, Rome, N. Y.; second prize, ten dollars; Duke, bred by exhibitor; sire Royal George, dam Maggie.

Sows over One Year Old.

George H. Bell, Rome, N. Y.; first prize, twenty dollars; Little Queen, bred by exhibitor.

John Bell, Lowell, N. Y.; second prize, ten dollars; Maid of Lowell, bred by G. H. Bell, Rome, N. Y.

Sows under One Year Old.

George H. Bell, Rome, N. Y.; first prize, twenty dollars, Handsome; bred by exhibitor.

John Bell, Lowell, N. Y.; second prize, ten dollars; Queen of Oneida, bred by exhibitor.

DUROC OR RED.

Herd Prize.

Oscar J. Lewis, Schodack Centre, N. Y.; gold medal.

Boars under One Year Old.

O. Howland & Son, Auburn, N. Y.; first prize, twenty dollars.

Oscar J. Lewis, Schodack Centre, N. Y.; second prize, ten dollars, bred by exhibitor.

Sows over One Year Old.

Oscar J. Lewis, Schodack Centre, N. Y.; first prize, twenty dollars, bred by exhibitor.

Daniel C. Munro, Elbridge, N. Y.; second prize, ten dollars.

Sows under One Year Old.

Oscar J. Lewis, Schodack Centre, N. Y.; first prize, twenty dollars, bred by exhibitor.

Ensign & Brown, Jeddo, N. Y.; second prize, ten dollars.

SMALL WHITE BREED.

Herd Prize.

T. R. Proctor, Utica, N. Y.; gold medal.

Boars over One Year Old.

T. R. Proctor, Utica, N. Y.; first prize, twenty dollars; Lord Rinaldo, bred by exhibitor, sire Rinaldo, dam Marchioness by King John, imported.

S. Donnan & Son, York, N. Y.; second prize, ten dollars; Young Prince, bred by Ensign & Brown, Jeddo, N. Y., farrowed November 22, 1881, sire Duke of Yorkshire, dam Queen Bess V by King John V.

Boars under One Year Old.

Ensign & Brown, Jeddo, N. Y.; first prize, twenty dollars.

A. G. Chriswell, Adams' Basin, N. Y.; second prize, ten dollars; Ivanhoe, eight months, bred by exhibitor.

Sows over One Year Old.

T. R. Proctor, Utica, N. Y.; first prize, twenty dollars; Queen III, bred by H. H. Ingersoll, Owego, N. Y., sire King John III, dam Queen by Duke of Yorkshire, imported.

Ensign & Brown, Jeddo, N. Y.; second prize, ten dollars.

Sows under One Year Old.

T. R. Proctor, Utica, N. Y.; first prize, twenty dollars; Queen of Oneida, bred by exhibitor, sire Lord John, dam Queen III, by King John.

A. G. Chriswell, Adams' Basin, N. Y. ; second prize, ten dollars ; Empress, eight months, bred by exhibitor.

BERKSHIRES.

Herd Prize.

T. R. Proctor, Utica, N. Y. ; gold medal.

Boars over One Year Old.

A. G. Barlow & Co., North Ridgeway, N. Y. ; first prize, twenty dollars ; Tom Hood V, bred by exhibitor, farrowed October 6, 1881, sire Tom Hood, dam Sallie Hillside.

A. G. Barlow & Co., North Ridgeway, N. Y. ; second prize, ten dollars ; Tom Hood, bred by A. M. Fulford, Belair, Md., farrowed October 5, 1880, sire Robin Hood 3rd, dam Pet.

Boars under One Year Old.

T. R. Proctor, Utica, N. Y. ; first prize, twenty dollars ; Viceroy of Canada, bred by John Snell's Sons, Edmonton, Canada, sire Royal Stewart, dam Sallie Oxford (imported) by Oxford.

T. R. Proctor, Utica, N. Y. ; second prize, ten dollars ; Gipsy Pearl, bred by exhibitor, sire Emperor III, dam Proctor's Black Pearl by Oxford Reserve.

Sows over One Year Old.

T. R. Proctor, Utica, N. Y. ; first prize, twenty dollars ; Queen of Utica, bred by John Snell's Sons, Edmonton, Canada, sire Royal Hope (imported), dam Cantata by Robin Hood.

T. R. Proctor, Utica, N. Y. ; second prize, ten dollars ; Lucille Western, bred by exhibitor, sire Proctor's Castor (imported), dam Western Belle II (imported) by Royal Carlisle.

Sows under One Year Old.

T. R. Proctor, Utica, N. Y. ; first prize, twenty dollars ; Proctor's Lady Maybreeze, bred by exhibitor, sire Royal Derby, dam Proctor's Lady Oxford by Oxford Reserve (imported).

T. R. Proctor, Utica, N. Y. ; second prize, ten dollars ; Proctor's Lady Reserve, bred by exhibitor, sire Royal Derby (imported), dam Proctor's Lady Oxford by Oxford Reserve (imported).

ESSEX.

Boars over One Year Old.

J. S. Woodward, Lockport, N. Y. ; first prize, twenty dollars.

Sows over One Year Old.

J. S. Woodward, Lockport, N. Y. ; first prize, twenty dollars.

Sows under One Year Old.

J. S. Woodward, Lockport, N. Y. ; first prize, twenty dollars.

POULTRY.

ASIATIC.

Light Brahmas.

L. J. Bundy, Ontario, N. Y. ; first prize, five dollars.

L. J. Bundy, Ontario, N. Y. ; second prize, three dollars.

Dark Brahmas.

L. J. Bundy, Ontario, N. Y. ; first prize, five dollars.

E. A. Wendell, Albany, N. Y. ; second prize, three dollars.

Buff, Lemon or Cinnamon Cochins.

L. J. Bundy, Ontario, N. Y. ; first prize, five dollars.

L. J. Bundy, Ontario, N. Y. ; second prize, three dollars.

Partridge or Grouse Cochins.

H. A. Jones, Worcester, Mass. ; first prize, five dollars, bred by S. L. Booth.

L. J. Bundy, Ontario, N. Y. ; second prize, three dollars.

White Cochins.

C. L. G. Blessing, Slingerlands, N. Y. ; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, three dollars.

Black Cochins.

L. J. Bundy, Ontario, N. Y. ; first prize, five dollars.

L. J. Bundy, Ontario, N. Y. ; second prize, three dollars.

Langshans

Roscoe C. James, Eagle Bridge, N. Y. ; first prize, five dollars.

DORKINGS.

Coloured Dorkings.

H. A. Jones, Worcester, Mass. ; first prize, five dollars

James Evans, Macedon, N. Y. ; second prize, three dollars.

Silver Gray Dorkings.

E. A. Wendell, Albany, N. Y. first prize, five dollars

White Dorkings.

J. V. Underwood, East Scott, N. Y. ; first prize, five dollars.

AMERICAN.

Dominiques.

Jones Wilcox, East Chatham, N. Y. ; first prize, five dollars.

Jones Wilcox, East Chatham, N. Y. ; second prize, three dollars.

Plymouth Rocks.

L. D. Ely, Rochester, N. Y. ; first prize, five dollars.

L. J. Bundy, Ontario, N. Y. ; second prize, three dollars.

Wyandottes.

Jones Wilcox, East Chatham, N. Y. ; first prize, five dollars.

O. Howland & Son, Auburn, N. Y. ; second prize, three dollars.

HAMBURGHES.

Golden Spangled.

O. Howland & Son, Auburn, N. Y.; first prize, five dollars.

O. Howland & Son, Auburn, N. Y.; second prize, three dollars.

Silver Spangled.

Jones Wilcox, East Chatham, N. Y.; first prize, five dollars.

Jones Wilcox, East Chatham, N. Y.; second prize, three dollars.

Golden Penciled.

O. Howland & Son, Auburn, N. Y.; second prize, three dollars.

Silver Penciled.

J. V. Underwood, East Scott, N. Y.; first prize, five dollars.

W. H. Underwood, East Scott, N. Y.; second prize, three dollars.

Black.

E. A. Wendell, Albany, N. Y.; first prize, five dollars.

Jones Wilcox, East Chatham, N. Y.; second prize, three dollars.

SPANISH.

Black Spanish.

O. Howland & Son, Auburn, N. Y.; first prize, five dollars.

White Leghorns.

L. D. Ely, Rochester, N. Y.; first prize, five dollars.

L. D. Ely, Rochester, N. Y.; second prize, three dollars.

Brown Leghorns.

O. Howland & Son, Auburn, N. Y.; first prize, five dollars.

Jones Wilcox, East Chatham, N. Y.; second prize, three dollars.

Black Leghorns.

Nicholay & Greene, Newark, N. Y.; first prize, five dollars.

Dominique Leghorns.

Jones Wilcox, East Chatham, N. Y.; first prize, five dollars.

O. Howland & Son, Auburn, N. Y.; second prize, three dollars.

FRENCH.

Houdans.

John W. McHarg, Albany, N. Y.; first prize, five dollars.

John W. McHarg, Albany, N. Y.; second prize, three dollars.

POLISH.

Black Polish.

J. V. Underwood, East Scott, N. Y.; first prize, five dollars.

White Polish.

- G. W. Bain, East Chatham, N. Y.; first prize, five dollars.
 G. W. Bain, East Chatham, N. Y.; second prize, three dollars.

Golden Polish.

- W. H. Underwood, East Scott, N. Y.; first prize, five dollars.
 W. H. Underwood, East Scott, N. Y.; second prize, three dollars.

Silver Polish.

- W. H. Underwood, East Scott, N. Y.; first prize, five dollars.
 O. Howland & Son, Auburn, N. Y.; second prize, three dollars.

GAMES.

Black-breasted Red.

- James Evans, Macedon, N. Y.; first prize, five dollars.
 H. H. Malleson, Hudson, N. Y.; second prize, three dollars.

Silver Duckwing Game.

- O. Howland & Son, Auburn, N. Y.; second prize, three dollars

Yellow Duckwing Game.

- E. A. Wendell, Albany, N. Y.; second prize, three dollars.

Other Approved Well-bred Games.

- H. H. Malleson, Hudson, N. Y.; first prize, five dollars, ginger red.

BANTAMS.

Red Game.

- T. C. Stanton, Rochester, N. Y.; first prize, five dollars.
 Ensign & Brown, Jeddo, N. Y.; second prize, three dollars.

Red Pile Game.

- H. A. Jones, Worcester, Mass.; first prize, five dollars.
 H. A. Jones, Worcester, Mass.; second prize, three dollars.

Silver Duckwing Game.

- C. L. G. Blessing, Slingerlands, N. Y.; first prize, five dollars.

Yellow Duckwing Game.

- O. Howland & Son, Auburn, N. Y.; first prize, five dollars.
 T. C. Stanton, Rochester, N. Y.; second prize, three dollars.

Silver-laced Sebrights.

- O. Howland & Son, Auburn, N. Y.; first prize, five dollars.
 H. A. Jones, Worcester, Mass.; second prize, three dollars.

Gold-laced Sebrights.

Nathan S. Perkins, Fairport, N. Y.; first prize, five dollars.

Nathan S. Perkins, Fairport, N. Y.; second prize, three dollars.

Black.

C. L. G. Blessing, Slingerlands, N. Y.; first prize, five dollars.

T. C. Stanton, Rochester, N. Y.; second prize, three dollars, African.

Other Bantams.

H. A. Jones, Worcester, Mass.; first prize, five dollars, black game.

H. A. Jones, Worcester, Mass.; second prize, three dollars.

TURKEYS, ETC.

Bronze Turkeys.

George Ayrault, Jr., Poughkeepsie, N. Y.; first prize, five dollars

George Ayrault, Poughkeepsie, N. Y.; second prize, three dollars.

White Turkeys.

O. Howland & Son, Auburn, N. Y.; first prize, five dollars.

Pearl Guinea Fowls.

H. A. Jones, Worcester, Mass.; first prize, three dollars, bred by C. J. Thompson.

O. Howland & Son, Auburn, N. Y.; second prize, two dollars.

White Guinea Fowls.

H. A. Jones, Worcester, Mass.; first prize, three dollars.

W. H. Underwood, East Scott, N. Y.; second prize, two dollars.

GEESE.

Embsden.

George Ayrault, Jr., Poughkeepsie, N. Y.; first prize, five dollars.

George Ayrault, Poughkeepsie, N. Y.; second prize, three dollars.

White China.

John H. Webber, Big Flats, N. Y.; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y.; second prize, three dollars.

Brown China.

Jones Wilcox, East Chatham, N. Y.; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y.; second prize, three dollars.

Wild.

C. L. G. Blessing, Slingerlands, N. Y.; first prize, five dollars.

O. Howland & Son, Auburn, N. Y.; second prize, three dollars.

DUCKS.

Rouen.

O. Howland & Son, Auburn, N. Y. ; first prize, five dollars.

Button Bros., Chittenango, N. Y. ; second prize, three dollars.

Aylesbury.

J. V. Underwood, East Scott, N. Y. ; second prize, three dollars.

Cayuga.

O. Howland & Son, Auburn, N. Y. ; first prize, five dollars.

O. Howland & Son, Auburn, N. Y. ; second prize, three dollars.

Muscovy.

W. H. Underwood, East Scott, N. Y. ; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, three dollars.

Pekin.

O. Howland & Son, Auburn, N. Y. ; first prize, five dollars.

O. Howland & Son, Auburn, N. Y. ; second prize, three dollars.

PIGEONS.

Pouters.

C. L. G. Blessing, Slingerlands, N. Y. ; first prize, three dollars.

H. E. Patterson, Rochester, N. Y. ; second prize, two dollars, silver dun.

Carriers.

Oscar E. Upton, Rochester, N. Y. ; first prize, three dollars.

George W. Martin, Rochester, N. Y. ; second prize, two dollars.

Tumblers.

H. E. Patterson, Rochester, N. Y. ; first prize, three dollars, almond.

Oscar E. Upton, Rochester, N. Y. ; second prize, two dollars, yellow bald head

Barbs.

Oscar E. Upton, Rochester, N. Y. ; first prize, three dollars, white.

Oscar E. Upton, Rochester, N. Y. ; second prize, two dollars, yellow.

Turbits, Solid Colour.

H. A. Jones, Worcester, Mass., first prize, three dollars, blue.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, two dollars.

Turbits, Winged.

H. A. Jones, Worcester, Mass. ; first prize, three dollars, silver winged.

H. A. Jones, Worcester, Mass. ; second prize, two dollars, blue winged.

Owls, Solid Colour.

H. A. Jones, Worcester, Mass. ; first prize, three dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, two dollars.

Fantails.

Oscar E. Upton, Rochester, N. Y. ; first prize, three dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, two dollars.

Jacobins.

Oscar E. Upton, Rochester, N. Y. ; first prize, three dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, two dollars.

Blue Rocks.

C. L. G. Blessing, Slingerlands, N. Y. ; first prize, three dollars.

H. E. Patterson, Rochester, N. Y. ; second prize, two dollars.

Dragoons.

T. C. Stanton, Rochester, N. Y. ; second prize, two dollars.

Antwerps.

T. C. Stanton, Rochester, N. Y. ; first prize, three dollars, red checker.

T. C. Stanton, Rochester, N. Y. ; second prize, two dollars, blue.

Collections of Pouters.

C. L. G. Blessing, Slingerlands, N. Y. ; first prize, five dollars.

Collections of Carriers.

T. C. Stanton, Rochester, N. Y. ; first prize, five dollars.

Collections of Tumblers.

Oscar E. Upton, Rochester, N. Y. ; first prize, five dollars, bald head.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, three dollars.

Collections of Fancy Pigeons.

Oscar E. Upton, Rochester, N. Y. ; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, three dollars.

Collections of Toy Pigeons.

Oscar E. Upton, Rochester, N. Y. ; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y. ; second prize, three dollars.

LOP-EARED OR MADAGASCAR RABBITS.

Bucks of any Colour.

E. A. Wendell, Albany, N. Y. ; first prize, three dollars.

Self-Coloured Does.

Harry Yates, Rochester, N. Y. ; first prize, three dollars.

Broken-Coloured Bucks.

Harry Yates, Rochester, N. Y.; first prize, three dollars.

COMMON RABBITS.

Bucks.

William Merz, Rochester, N. Y.; first prize, two dollars.

William Merz, Rochester, N. Y.; second prize, one dollar.

Does.

William Merz, Rochester, N. Y.; first prize, two dollars.

IMPLEMENTS, MACHINERY, AND MANUFACTURED ARTICLES.*

2307. Kemp & Burpee Manufacturing Co., Syracuse, N. Y.; manure spreader, C. H. M.
2323. Robert Platman, Bellona, N. Y.; Platman's seed drill and fertilizer distributor, C. M.
2338. Wheeler & Melick Co., Albany, N. Y.; the Daniels plow sulky, C. H. M.
2349. J. A. Cross, Fultonville, N. Y.; conveyor and elevator for hay, grain, ensilage, etc., C. H. M.
2361. Eureka Mower Co., Towanda, Penn.; improved arrangement for lifting finger bar, C. M.
2397. Planters' Hoe Co., Troy, N. Y.; Herrington potato digger, C. H. M.
2399. W. G. Ricker, Rochester, N. Y.; Excelsior hay car and slings, C. M.
2421. American Grinding Mill Co., Chicago, Ill.; portable corn and feed mills, C. M.
2423. Bell City Manufacturing Co., Racine, Wis.; safety feed attachment to ensilage cutter, C. H. M.
2426. Boomer & Boschert Press Co., Syracuse, N. Y.; apple grater, C. H. M.
2428. Boomer & Boschert Press Co., Syracuse, N. Y.; knuckle-joint cider press, C. H. M.
2429. Boomer & Boschert Press Co., Syracuse, N. Y.; cider, jelly and sorghum evaporator, C. H. M.
2431. Harmon W. Cornell, Owego, N. Y.; hand corn-sheller, C. H. M.
2434. Genesee Valley Mfg. Co., Mount Morris, N. Y.; Little Tiger fanning mill, C. M.
2436. David H. Goodell, Antrim, N. H.; apple parers, corers and slicers, C. H. M.
2446. Rochester Agricultural Works, Rochester, N. Y.; safety fly-wheel attachment to ensilage cutters, C. H. M.
2447. E. W. Ross & Co., Fulton, N. Y.; ensilage and fodder cutters, C. H. M.
2453. D. W. Seeley, Albany, N. Y.; Buckman & Seeley's patent hay and cotton press, gold medal.
2456. A. W. Stevens & Co., Auburn, N. Y.; French burr portable feed mills, C. H. M.
2457. Taylor Horse Power Co., Chicago, Ill.; the Taylor horse power, C. H. M.
2461. J. Valentine, Gorham, N. Y.; the Miller's Friend power corn-sheller and cleaner, C. M.
2462. S. B. Van Duzee Mfg. Co., Gouverneur, N. Y.; Bonanza fanning mill, grain and seed separator, and flax-seed cleaner, C. H. M.
2466. Alexander, Bradley & Dunning, Syracuse, N. Y.; portable saw-mill, C. H. M.
2467. The E. M. Birdsall Co., Auburn, N. Y.; traction steam engine, C. H. M.
2468. The E. M. Birdsall Co., Auburn, N. Y.; portable steam engine, C. M.
2478. Chas. Perrigo & Co., Groton, N. Y.; agricultural engine, C. H. M.
2482. A. C. Powell, Syracuse, N. Y.; Carley's portable circular saw-mill, C. M.
2486. Straight Line Engine Co., Syracuse, N. Y.; straight line engine, B. M.
2490. J. C. Brown, Davenport Centre, N. Y.; Crystal butter package, C. M.

* The letters B. M. denote that a bronze medal was awarded; C. H. M. that the exhibitor is entitled to a certificate of highest merit; C. M. that the exhibitor is entitled to a certificate of merit. The numbers preceding the names are the catalogue numbers.

2492. Chapin & Smith, Poultney, Vt.; display of churns, C. M.
2499. Philadelphia Creamery Supply Co. (limited), Philadelphia, Pa.; Danish Weston centrifugal milk separator for the immediate separation of cream from milk by centrifugal force, C. M.
2501. Vermont Farm Machine Co., Bellows Falls, Vt.; cabinet creamery, C. H. M.
- 2501½. Vermont Farm Machine Co., Bellows Falls, Vt.; fruit dryer, C. M.
2505. Stephen J. Adams, Willett, N. Y.; Adams' patent cow stanchion, C. M.
2508. Buffalo Scale Co., Buffalo, N. Y.; platform scales, C. H. M.
2510. D. B. Cowles, Rochester, N. Y.; suction pumps, C. M.
2512. Cronk Hanger Co., Elmira, N. Y.; slide door hanger and stay, C. M.
- 2512½. C. R. Jones, Syracuse, N. Y.; for rope differential pulleys, C. H. M.
2518. Erie Car Works (limited), Erie, Penn.; Waldo's combined road builder and grading machine, C. M.
2519. David H. Goodell, Antrim, N. H.; White Mountain hammock chair, C. M.
2523. Howard & Jennings, Syracuse, N. Y.; wooden suction and lift pumps, C. M.
2524. A. J. Ingersoll, Corning, N. Y.; the American portable fire escape, C. M.
2525. Jones of Binghamton, Binghamton, N. Y.; five ton waggon scale, C. H. M.
2529. King Adjustable Chair Co., Rochester, N. Y.; King's adjustable chairs, C. M.
2531. J. N. Knapp, Syracuse, N. Y.; improved faucets for ale and beer, C. M.
2537. Peck & Tyler, Jordan, N. Y.; power well drill on wheels, C. M.
2538. S. Pennock & Sons' Co., Chester, Penn.; Pennock's patent road machine, C. H. M.
2541. George W. Rhines, Rochester, N. Y.; improved frame for drying clothes, C. M.
- 2553½. National Fence Co., New York, N. Y.; for display of iron fence, C. H. M.
2557. Austin Tomlinson & Webster Manufacturing Co., Jackson, Mich.; farm waggons and trucks, B. M.
2558. R. M. Bingham & Co., Rome, N. Y.; sleigh, cart and carriage work, C. H. M.
- 2504½. Thomas Brown & Co., Rochester, N. Y.; carriages, C. M.
- 2557½. E. D. Clapp Wagon Co., Auburn, N. Y.; for display of farm waggons, C. H. M.
2560. Hixson & Costello, Clarkson, N. Y.; Surrey canopy top and square body carriages, C. H. M.
2561. Honeoye Falls Manufacturing Co., Honeoye Falls, N. Y.; banded hub for use on road waggons, C. H. M.
2566. H. W. Marcellus, Rochester, N. Y.; Milburn farm and lumber waggons, platform spring waggons, buggies and road carts, C. H. M.
2568. H. A. Moyer, Syracuse, N. Y.; pleasure and business carts, with and without tops; side spring and side bar carriages, platform spring and buck-board waggons, C. M. Also for business carts, C. H. M.
2569. H. A. Moyer, Syracuse, N. Y.; Moyer gear, C. H. M.
2571. Pells' Spring Gear Co., Rome, N. Y.; waggon gear and body, with Pells' patent spring, C. H. M.
2574. J. A. Rowell, Amesbury, Mass.; English Surrey waggon canopy top, single seat, C. M.
2576. Short & Smith, Syracuse, N. Y.; buggies, waggons, cutters and sleighs, B. M.
2577. Waterloo Wagon Co., Waterloo, N. Y.; Waterloo waggons, C. H. M.
- 2577½. J. W. Kelley, Mt. Holley, Vt.; excelsior shaft and pole coupling, C. M.

FARM PRODUCE.

GRAIN, SEEDS AND HOPS GROWN IN 1883.

White Winter Wheat.

W. L. Eastman, Ovid, N. Y.; first prize, ten dollars, Landreth.

A. W. Smith, Cuba, N. Y.; second prize, five dollars.

Red Winter Wheat.

M. F. Pierson, Seneca Castle, N. Y.; first prize, ten dollars, Martin's Amber.
J. H. Andrews, Rochester, N. Y.; second prize, five dollars.

Spring Wheat.

George Campbell, Green's Landing, Penn.; first prize, ten dollars, red Siberian.
E. Van Allen, Bethlehem Centre, N. Y.; second prize, five dollars, Russian.

Winter Rye.

George Campbell, Green's Landing, Penn.; first prize, ten dollars, Australian.
E. Van Allen, Bethlehem Centre, N. Y.; second prize, five dollars.

Spring Rye.

George Campbell, Green's Landing, Penn.; first prize, ten dollars, Australian.
E. Van Allen, Bethlehem Centre, N. Y.; second prize, five dollars.

White Oats.

M. F. Pierson, Seneca Castle, N. Y.; first prize, ten dollars, Australian.
George Campbell, Green's Landing, Penn.; second prize, five dollars, New
Welcome.

Black or Gray Oats.

George Campbell, Green's Landing, Penn.; first prize, ten dollars, Molds'.
C. L. G. Blessing, Slingerlands, N. Y.; second prize, five dollars.

Winter Barley.

C. L. G. Blessing, Slingerlands, N. Y.; second prize, five dollars.

Two-rowed Spring Barley.

George Campbell, Green's Landing, Penn.; first prize, ten dollars.
Cornelius A. Bradt, Castile, N. Y.; second prize, five dollars.

Four-rowed Spring Barley.

George Campbell, Green's Landing, Penn.; second prize, five dollars.

Yellow Indian Corn (shelled).

E. Van Allen, Bethlehem Centre, N. Y.; second prize, five dollars.

Large Field Beans.

J. H. Andrews, Rochester, N. Y.; second prize, five dollars.

Small Field Peas.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, ten dollars.

Buckwheat.

George Campbell, Green's Landing, Penn.; first prize, five dollars, silver hull.
E. Van Allen, Bethlehem Centre, N. Y.; second prize, three dollars.

Millet.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, five dollars.

A. W. Smith, Cuba, N. Y.; second prize, three dollars.

Flax Seed.

E. Van Allen, Bethlehem Centre, N. Y.; second prize, three dollars.

Seed Ears of Yellow Corn, Eight-rowed.

C. L. G. Blessing, Slingerlands, N. Y.; first prize, five dollars.

E. Van Allen, Bethlehem Centre, N. Y.; second prize, three dollars.

Seed Ears of Yellow Corn, Twelve-rowed.

Jones Wilcox, East Chatham, N. Y.; first prize, five dollars.

C. L. G. Blessing, Slingerlands, N. Y.; second prize, three dollars.

Seed Ears of White Corn.

C. L. G. Blessing, Slingerlands, N. Y.; second prize, three dollars.

Seed Ears of Dent Corn.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, five dollars.

Charles Coolidge, Phelps, N. Y.; second prize, three dollars, white, Surprise.

Seed Ears of Early Sweet Corn.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, five dollars.

Howard Bros., Irondequoit, N. Y.; second prize, three dollars.

Seed Ears of Late Sweet Corn.

C. L. G. Blessing, Slingerlands, N. Y.; first prize, five dollars.

Howard Bros., Irondequoit, N. Y.; second prize, three dollars.

VEGETABLES.

Celery.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Cauliflowers.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Cabbage.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

E. Van Allen, Bethlehem Centre, N. Y.; second prize, two dollars.

Lettuce.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

Turnips.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

Mangolds.

A. W. Reilly, Barnard's Crossing, N. Y.; second prize, two dollars.

Beets.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

E. Van Allen, Bethlehem Centre, N. Y.; second prize, two dollars.

Orange Carrots.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Parsnips.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

A. W. Reilly, Barnard's Crossing, N. Y.; second prize, two dollars.

Salsify.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

A. W. Reilly, Barnard's Crossing, N. Y.; second prize, two dollars.

Kohl-Rabi.

Oscar J. Lewis, Schodack Centre, N. Y.; first prize, three dollars.

Onions.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Tomatos.

Howard Bros., Irondequoit, N. Y.; first prize, three dollars.

E. Van Allen, Bethlehem Centre, second prize, two dollars.

Egg Plants.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Garden Beans.

W. H. Underwood, East Scott, N. Y.; first prize, three dollars.

M. F. Pierson, Seneca Castle, N. Y.; second prize, two dollars.

Peppers.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Squashes.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

Howard Bros., Irondequoit, N. Y.; second prize, two dollars.

Pumpkins.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars.

C. L. G. Blessing, Slingerlands, N. Y.; second prize, two dollars.

Potatoes—Exhibitions of Early Varieties.

Oscar J. Lewis, Schodack Centre, N. Y.; first prize, ten dollars.

M. F. Pierson, Seneca Castle, N. Y.; second prize, five dollars.

Potatoes — Exhibitions of Late Varieties.

W. H. Underwood, East Scott, N. Y.; first prize, ten dollars.

Oscar J. Lewis, Schodack Centre, N. Y.; second prize, five dollars.

Potatoes — Exhibitions of Stock Feeding Varieties.

M. F. Pierson, Seneca Castle, N. Y.; first prize, ten dollars.

Oscar J. Lewis, Schodack Centre, N. Y.; second prize, five dollars.

Collections of Vegetables.

Edwin Van Allen, Bethlehem Centre, N. Y.; first prize, twenty-five dollars.

BUTTER.

Special prize for the best six packages, not less than 30 lbs. net each, made in the same Creamery or Private Dairy.

George W. Kinney, Stanwix, N. Y.; fifty dollars. •

Packages made at any time in Creamery.

J. P. Straight, Laona, N. Y.; first prize, thirty dollars.

Cooper & Hawks, Laona, N. Y.; second prize, twenty dollars.

George W. Kinney, Stanwix, N. Y.; third prize, ten dollars.

Packages made in June in Private Dairy.

A. B. Cary, West Winfield, N. Y.; first prize, thirty dollars.

C. W. Martin, South Worcester, N. Y.; second prize, twenty dollars.

P. K. Stoddard, Prattsburgh, N. Y.; third prize, ten dollars.

Packages made at any time in Private Dairy.

A. B. Cary, West Winfield, N. Y.; first prize, thirty dollars.

A. J. Rice, Sodus, N. Y.; second prize, twenty dollars.

P. K. Stoddard, Prattsburgh, N. Y.; third prize, ten dollars.

Moulds or Rolls.

Houghton Farm, Mountainville, N. Y.; first prize, fifteen dollars.

M. D. Chapin, Poultney, Vt.; second prize, ten dollars.

A. B. Cary, West Winfield, N. Y.; third prize, five dollars.

CHEESE.

Special Prize for the best dozen Cheeses, not less than twenty lbs. each, from the same Factory or Dairy, and suitable for Army and other Uses.

Thomas Bros., Franklinville, N. Y.; fifty dollars.

American Cheeses over One Year Old.

W. H. Spooner, Walworth, N. Y. ; second prize, twenty dollars.
 Clear Spring Factory, Laona, N. Y. ; third prize, ten dollars.

American Cheeses less than One Year Old.

Thomas Bros., Franklinville, N. Y. ; first prize, thirty dollars.
 A. J. Loomis, Cicero, N. Y. ; second prize, twenty dollars.
 Laona Factory, Laona, N. Y. ; third prize, ten dollars.

Foreign Styles of Cheeses.

Lawrence & Durland, Chester, N. Y. ; Star cream cheese, twenty-five dollars.
 C. H. Green, Chester, N. Y. ; Neufchatel cheese, twenty-five dollars.
 J. Neuenschwander & Co., Monroe, N. Y. ; Brie cheese, twenty-five dollars.

BREAD, SUGAR, ETC.

Wheaten Bread.

Mrs. J. A. Henry, Reed's Corners, N. Y. ; first prize, five dollars.
 E. Van Allen, Bethlehem Centre, N. Y. ; second prize, three dollars, patent flour.

Rye Bread.

E. Van Allen, Bethlehem Centre, N. Y. ; first prize, five dollars.
 M. E. Rich, Rochester, N. Y. ; second prize, three dollars.

Indian, or Rye and Indian, Bread.

Mrs. J. A. Henry, Reed's Corners, N. Y. ; first prize, five dollars.
 M. H. Tennant, Rome, N. Y. ; second prize, three dollars.

Maple Syrup.

Mrs. B. D. Beal, Rochester, N. Y. ; first prize, five dollars.
 Mrs. W. H. Graves, Blossvale, N. Y. ; second prize, three dollars.

Preserved Fruits.

Oscar J. Lewis, Schodack Centre, N. Y. ; first prize, five dollars.
 E. Van Allen, Bethlehem Centre, N. Y. ; second prize, three dollars.

Pickles in Vinegar.

E. Van Allen, Bethlehem Centre, N. Y. ; first prize, five dollars, mixed.
 M. E. Rich, Rochester, N. Y. ; second prize, three dollars.

Dried Apples.

E. Van Allen, Bethlehem Centre, N. Y. ; first prize, five dollars.
 M. H. Tennant, Rome, N. Y. ; second prize, three dollars.

Dried Peaches.

Mrs. S. M. Williams, Taberg, N. Y. ; first prize, five dollars.
 Miss L. P. Tennant, Stanwix, N. Y. ; second prize, three dollars.

Dried Whortleberries.

Mrs. S. M. Williams, Taberg, N. Y. ; first prize, five dollars.

M. H. Tennant, Rome, N. Y. ; second prize, three dollars.

Dried Raspberries.

E. Van Allen, Bethlehem Centre, N. Y. ; first prize, five dollars.

J. H. Andrews, Rochester, N. Y. ; second prize, three dollars.

Box Honey.

P. Miller, Fredonia, N. Y. ; first prize, five dollars.

E. Van Allen, Bethlehem Centre, N. Y. ; second prize, three dollars.

Extracted or Strained Honey.

J. H. Andrews, Rochester, N. Y. ; first prize, five dollars.

Mrs. B. D. Beal, Rochester, N. Y. ; second prize, three dollars.

DOMESTIC MANUFACTURES.

Woolen Blankets.

M. H. Tennant, Rome, N. Y. ; second prize, three dollars.

All Wool Horse Blankets.

Miss L. P. Tennant, Stanwix, N. Y. ; first prize, five dollars.

Mrs. W. H. Graves, Blossvale, N. Y. ; second prize, three dollars.

Woolen Cloth.

Mrs. W. H. Graves, Blossvale, N. Y. ; first prize, five dollars.

Mrs. S. M. Williams, Taberg, N. Y. ; second prize, three dollars.

Woolen Flannel.

M. H. Tennant, Rome, N. Y. ; first prize, five dollars.

Mrs. S. M. Williams, Taberg, N. Y. ; second prize, three dollars.

Woolen and Cotton Flannel.

Mrs. S. M. Williams, Taberg, N. Y. ; first prize, five dollars.

Miss L. P. Tennant, Stanwix, N. Y. ; second prize, three dollars.

Linsey Woolsey.

Mrs. S. M. Williams, Taberg, N. Y. ; first prize, five dollars.

Mrs. W. H. Graves, Blossvale, N. Y. ; second prize, three dollars.

Cotton and Wool Kersey.

Mrs. S. M. Williams, Taberg, N. Y. : second prize, three dollars.

Rag Carpet.

Mrs. T. Brown, Chili, N. Y. ; first prize, five dollars.

Mrs. C. P. Sprague, Penfield, N. Y. ; second prize, three dollars.

Hearth Rugs.

G. H. F. Van Horne, Fonda, N. Y.; first prize, five dollars.
 Mrs. J. A. Henry, Reed's Corners, N. Y.; second prize, three dollars.

Double Carpet Coverlets.

Mrs. W. H. Graves, Blossvale, N. Y.; first prize, five dollars.
 Miss L. P. Tennant, Stanwix, N. Y.; second prize, three dollars.

Linen Cloth.

Mrs. S. M. Williams, Taberg, N. Y.; second prize, three dollars.

Linen Kersey.

Mrs. W. H. Graves, Blossvale, N. Y.; second prize, three dollars.

Tow Cloth.

Mrs. W. H. Graves, Blossvale, N. Y.; second prize, three dollars.

Linen Bagging.

Mrs. S. M. Williams, Taberg, N. Y.; first prize, five dollars.
 Miss L. P. Tennant, Stanwix, N. Y.; second prize, three dollars.

Knit Bed Spreads.

Clarissa Vose, Rochester, N. Y.; first prize, three dollars.
 A. S. Johnson, Spencerport, N. Y.; second prize, two dollars.

Worked or Quilted Bed Spreads.

Mrs. Eminons Edson, Spencerport, N. Y.; first prize, three dollars.
 Mrs. Hulbert, Rochester, N. Y.; second prize, two dollars.

Silk Quilts.

Miss M. D. Schuyler, Rochester, N. Y.; first prize, three dollars.
 Mrs. H. P. Croffoot, Rochester, N. Y.; second prize, two dollars.

Balmoral Petticoats.

Mrs. W. H. Graves, Blossvale, N. Y.; first prize, three dollars.
 Mrs. S. M. Williams, Taberg, N. Y.; second prize, two dollars.

Woolen Knit Stockings.

Mrs. W. H. Graves, Blossvale, N. Y.; first prize, three dollars.
 Mrs. T. Brown, Chili, N. Y.; second prize, two dollars.

Worsted Knit Stockings.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, three dollars.
 M. H. Tennant, Rome, N. Y.; second prize, two dollars.

Woolen Knit Mittens.

A. S. Johnson, Spencerport, N. Y.; first prize, three dollars.
 Mrs. J. A. Henry, Reed's Corners, N. Y.; second prize, two dollars.

Woolen Fringe Mittens.

Mrs. W. H. Graves, Taberg, N. Y.; first prize, three dollars.

Miss L. P. Tennant, Stanwix, N. Y.; second prize, two dollars.

Linen or Cotton Knit Stockings.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, three dollars.

G. H. F. Van Horne, Fonda, N. Y.; second prize, two dollars.

Linen Sewing Thread.

Mrs. W. H. Graves, Blossvale, N. Y.; first prize, three dollars.

Miss L. P. Tennant, Stanwix, N. Y.; second prize, two dollars.

EXTRA AWARDS.

May A. D'Aubigne, Rochester, N. Y.; embroidered skirt and infant's carriage robe, two dollars.

Miss Julia A. Stevens, Rochester, N. Y.; oriental sofa pillow, two dollars.

FLOWERS.

PROFESSIONAL LIST.

Exhibitions of Cut Flowers.

James Vick, Rochester, N. Y.; first prize, ten dollars.

Collections of Dahlias.

James Vick, Rochester, N. Y.; first prize, six dollars.

Twenty-four Dahlias.

James Vick, Rochester, N. Y.; first prize, five dollars

Twelve Dahlias.

James Vick, Rochester, N. Y.; first prize, three dollars.

American Seedling Dahlias.

James Vick, Rochester, N. Y.; first prize, one dollar.

Collections of Annual Phloxes.

James Vick, Rochester, N. Y.; first prize, five dollars.

Twelve Phloxes.

James Vick, Rochester, N. Y.; first prize, three dollars.

Seedling Phloxes.

James Vick, Rochester, N. Y.; first prize, one dollar.

Collections of Verbenas.

James Vick, Rochester, N. Y.; first prize, five dollars.

Twelve Varieties of Verbenas.

James Vick, Rochester, N. Y.; first prize, three dollars.

Robert J. Donnelly, Rochester, N. Y.; second prize, two dollars.

American Seedling Verbenas.

James Vick, Rochester, N. Y.; first prize, one dollar.

Collections of Asters.

James Vick, Rochester, N. Y.; first prize, three dollars.

Collections of Celosias.

James Vick, Rochester, N. Y.; first prize, three dollars.

Collections of Lilies.

James Vick, Rochester, N. Y.; first prize, three dollars

Collections of Pansies.

Robert J. Donnelly, Rochester, N. Y.; first prize, three dollars.

Collections of Gladiolus.

James Vick, Rochester, N. Y.; first prize, three dollars.

Twelve Varieties of Gladiolus.

James Vick, Rochester, N. Y.; first prize, two dollars.

AMATEUR LIST.

Exhibitions of Cut Flowers.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, ten dollars.

M. H. Tennant, Rome, N. Y.; second prize, five dollars.

Collections of Dahlias.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, six dollars.

M. H. Tennant, Rome, N. Y.; second prize, three dollars.

Twelve Dahlias.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, three dollars.

M. H. Tennant, Rome, N. Y.; second prize, two dollars.

Six Dahlias.

M. H. Tennant, Rome, N. Y.; first prize, two dollars.

Miss L. P. Tennant, Stanwix, N. Y.; second prize, one dollar.

Collections of Roses.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, six dollars.

M. H. Tennant, Rome, N. Y.; second prize, three dollars.

Collections of Verbenas.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, five dollars.

Miss L. P. Tennant, Stanwix, N. Y.; second prize, three dollars.

Twelve Varieties of Verbenas.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, three dollars.

M. H. Tennant, Rome, N. Y.; second prize, two dollars.

Six Varieties of Verbenas.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, two dollars.

M. H. Tennant, Rome, N. Y.; second prize, one dollar.

Seedling Verbenas.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, one dollar.

Collections of Phloxes.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, five dollars.

Miss L. P. Tennant, Stanwix, N. Y.; second prize, three dollars.

Perennial Phloxes (six varieties named).

Miss L. P. Tennant, Stanwix, N. Y.; first prize, two dollars.

J. H. Andrews, Rochester, N. Y.; second prize, one dollar.

Seedling Phloxes.

J. H. Andrews, Rochester, N. Y.; first prize, one dollar.

Collections of Asters.

E. Van Allen, Bethlehem Centre, N. Y.; first prize, three dollars

M. H. Tennant, Rome, N. Y., second prize, two dollars.

Collections of Pansies.

M. H. Tennant, Rome, N. Y.; first prize, three dollars.

J. Miller, West Brighton, N. Y.; second prize, two dollars.

Ten Week Stocks.

J. H. Andrews, Rochester, N. Y.; first prize, three dollars.

Collections of Gladiolus.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, three dollars.

M. H. Tennant, Rome, N. Y.; second prize, two dollars.

Twelve Varieties of Gladiolus.

M. H. Tennant, Rome, N. Y.; first prize, two dollars.

Miss L. P. Tennant, Stanwix, N. Y.; second prize, one dollar.

Everlasting Flowers.

Miss L. P. Tennant, Stanwix, N. Y.; first prize, three dollars.

M. H. Tennant, Rome, N. Y.; second prize, two dollars.

GENERAL LIST — OPEN TO ALL COMPETITORS.

Collections of Pot Plants.

J. B. Keller, Rochester, N. Y.; first prize, fifteen dollars.

F. Schlegel, Rochester, N. Y.; second prize, ten dollars.

Twenty Greenhouse and Stove Plants.

J. B. Keller, Rochester, N. Y.; first prize, ten dollars.

Ten Greenhouse and Stove Plants.

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

Groups of Palms.

F. Schlegel, Rochester, N. Y.; first prize, eight dollars.

J. B. Keller, Rochester, N. Y.; second prize, four dollars.

Groups of Ferns.

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

F. Schlegel, Rochester, N. Y.; second prize, three dollars.

Six Varieties of Variegated Leaved Plants.

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

F. Schlegel, Rochester, N. Y.; second prize, three dollars.

Single Variegated Leaved Plants.

J. B. Keller, Rochester, N. Y.; first prize, two dollars.

Twelve Zonal Pelargoniums (Single).

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

One Zonal Pelargonium (Single).

J. B. Keller, Rochester, N. Y.; first prize, two dollars.

Six Zonal Pelargoniums (Double).

J. B. Keller, Rochester, N. Y.; first prize, three dollars.

One Zonal Pelargonium (Double).

J. H. Andrews, Rochester, N. Y.; first prize, two dollars.

Pairs of Hand Bouquets.

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

Robert J. Donnelly, Rochester, N. Y.; second prize, three dollars.

Pairs of Table Bouquets.

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

Robert J. Donnelly, Rochester, N. Y.; second prize, three dollars.

Button-hole Bouquets.

J. B. Keller, Rochester, N. Y.; first prize, three dollars.

Baskets of Flowers.

J. B. Keller, Rochester, N. Y.; first prize, five dollars.

Robert J. Donnelly, Rochester, N. Y.; second prize, three dollars.

Pairs of Hanging Baskets.

J. B. Keller, Rochester, N. Y.; first prize, three dollars.

J. H. Andrews, Rochester, N. Y.; second prize, two dollars.

FRUITS.

PROFESSIONAL LIST.

Collections of Apples.

Ellwanger & Barry, Rochester, N. Y.; first prize, ten dollars.

Twenty Varieties of Apples.

Ellwanger & Barry, Rochester, N. Y. ; first prize, eight dollars.

Collections of Pears.

Ellwanger & Barry, Rochester, N. Y. ; first prize, fifteen dollars.

Twenty Varieties of Pears.

Ellwanger & Barry, Rochester, N. Y. ; first prize, ten dollars.

Ten Varieties of Pears.

Ellwanger & Barry, Rochester, N. Y. ; first prize, five dollars.

Collections of Peaches.

Ellwanger & Barry, Rochester, N. Y. ; first prize, five dollars.

Three Varieties of Peaches.

Ellwanger & Barry, Rochester, N. Y. ; first prize, three dollars.

Dish of One Variety of Peaches.

Ellwanger & Barry, Rochester, N. Y. ; first prize, two dollars.

Collections of Plums.

Ellwanger & Barry, Rochester, N. Y. ; first prize, five dollars.

Five Varieties of Plums.

Ellwanger & Barry, Rochester, N. Y. ; first prize, three dollars.

Dish of One Variety of Plums.

Ellwanger & Barry, Rochester, N. Y. ; first prize, two dollars.

Quinces.

Ellwanger & Barry, Rochester, N. Y. ; first prize, two dollars.

Ten Varieties of Native Grapes.

B. W. Clark, Lockport, N. Y. ; first prize, ten dollars.

Five Varieties of Native Grapes.

B. W. Clark, Lockport, N. Y. ; first prize, five dollars.

AMATEUR LIST.

Collections of Apples.

H. Hoffman, Elba, N. Y. ; first prize, ten dollars.

M. F. Pierson, Seneca Castle ; second prize, five dollars.

Ten Varieties of Apples.

H. Hoffman, Elba, N. Y. ; first prize, five dollars.

J. H. Andrews, Rochester, N. Y. ; second prize, three dollars.

Five Varieties of Apples.

H. Hoffman, Elba, N. Y. ; first prize, three dollars.

Mrs. B. D. Beal, Rochester, N. Y. ; second prize, two dollars.

Ten Varieties of Pears.

H. W. Peck, Rochester, N. Y.; first prize, five dollars.

Wm. H. Pillow, Rochester, N. Y.; second prize, three dollars.

Five Varieties of Pears.

Wm. H. Pillow, Rochester, N. Y.; first prize, three dollars.

J. T. Sproat, Rochester, N. Y.; second prize, two dollars.

Five Varieties of Peaches.

M. F. Pierson, Seneca Castle, N. Y.; first prize, three dollars.

George Bahringer, Rochester, N. Y.; second prize, two dollars.

Dish of One Variety of Peaches.

George C. Snow, Penn Yan, N. Y.; first prize, two dollars.

J. S. Stone, Rochester, N. Y.; second prize, one dollar.

Five Varieties of Plums.

H. Hoffman, Elba, N. Y.; first prize, three dollars.

Wm. H. Pillow, Rochester, N. Y.; second prize, two dollars.

Three Varieties of Plums.

George Bahringer, Rochester, N. Y.; first prize, two dollars.

Wm. H. Pillow, Rochester, N. Y.; second prize, one dollar.

Dish of Ten Specimens of Plums.

Wm. H. Pillow, Rochester, N. Y.; first prize, one dollar.

Quinces.

J. S. Stone, Charlotte, N. Y.; first prize, two dollars.

George Bahringer, Rochester, N. Y.; second prize, one dollar.

Ten Varieties of Native Grapes.

George Bahringer, Rochester, N. Y.; first prize, six dollars.

Wm. H. Pillow, Rochester, N. Y.; second prize, three dollars.

Five Varieties of Native Grapes.

Wm. H. Pillow, Rochester, N. Y.; first prize, three dollars.

FRUITS, SINGLE DISHES, OPEN TO ALL.

APPLES.

Baldwin.

H. Hoffman, Elba, N. Y.; two dollars.

King of Tompkins County.

H. Hoffman, Elba, N. Y.; two dollars.

Northern Spy.

Wm. H. Pillow, Rochester, N. Y.; two dollars.

Rhode Island Greening.

H. Hoffman, Elba, N. Y.; two dollars.

Roxbury Russet.

H. Hoffman, Elba, N. Y.; two dollars.

Twenty Ounce.

H. Hoffman, Elba, N. Y.; two dollars.

PEARS.

Bartlett.

Wm. H. Pillow, Rochester, N. Y.; two dollars.

Buerre d' Anjou.

J. T. Sproat, Rochester, N. Y.; two dollars.

Buerre Clairgcau.

H. N. Peck, Rochester, N. Y.; two dollars.

Duchesss d' Angouleme

Wm. H. Pillow, Rochester, N. Y.; two dollars.

Flemish Beauty.

H. N. Peck, Rochester, N. Y.; two dollars.

Seckel.

Wm. H. Pillow, Rochester, N. Y.; two dollars.

Lawrence.

Wm. H. Pillow, Rochester, N. Y.; two dollars.

Winter Nelis.

Wm. H. Pillow, Rochester, N. Y.; two dollars.

GRAPES.

Concord.

George Bahringer, Rochester, N. Y.; two dollars.

Catawba.

Mrs. B. D. Beal, Rochester, N. Y.; two dollars.

Delaware.

George Bahringer, Rochester, N. Y.; two dollars.

Hartford.

George Bahringer, Rochester, N. Y., two dollars.

Isabella.

Wm. H. Pillow, Rochester, N. Y.; two dollars.

Any of Rogers' Varieties.

George Bahringer, Rochester, N. Y.; two dollars.

JUDGES, 1883.

Shorthorns.

John Ashworth.....	Ottawa, Canada.
R. S. Charles.....	Angelica, N. Y.

Devons and Herefords.

Henry E. Smith... ..	Enfield, R. I.
Albert G. Phillips.....	Port Jackson, N. Y.

Ayrshires.

Obadiah Brown.....	Providence, R. I.
E. L. Coy.....	West Hebron, N. Y.

Holsteins.

Alfred DeGraff.....	Fonda, N. Y.
W. R. Willetts	Skaneateles, N. Y.

Jerseys and Guernseys.

Edward Worth	Wawa, Penn.
Edward Burnet.....	Southborough Mass.

Milch Cows and Fat Cattle.

E. H. Richmond.....	Newark, N. Y.
Jacob Boshart.....	Johnstown, N. Y.

Horses.

Oliver Fleming.....	Owego, N. Y.
James M. Whitney.....	Rochester, N. Y.
C. Fred. Herbst... ..	Syracuse, N. Y.

Long Woolled Sheep.

R. S. Charles.....	Angelica, N. Y.
C. C. Chapman.....	Hoosick Falls, N. Y.

Middle Woolled Sheep.

B. F. Peck.....	East Bethany, N. Y.
Chauncey Hills.....	Delaware, O.

Merinos.

C. Horace Hubbard.....	Springfield, Vt.
Rowland J. Gardner.....	Penn Yan, N. Y.

Swine — Large Breeds.

Levi S. Fulton	Rochester, N. Y.
Sherman Cottrell.....	Hoosick Falls, N. Y.

Swine — Small Breeds.

John Ashworth.....	Ottawa, Canada.
M. C. Weld	Closter, N. J.

Poultry.

I. K. Felch.....	Natick, Mass.
A. M. Jones.....	Fairmount, N. Y.

Grain.

W. H. Wisner.....	Warwick, N. Y.
W. Harrison Smith.....	Geneva, N. Y.

Vegetables.

E. S. Hayward.....	Rochester, N. Y.
G. H. F. Van Horne.....	Fonda, N. Y.

Butter, Cheese, etc.

E. Ward.....	New York, N. Y.
C. B. Herriman.....	Ogdensburgh, N. Y.
E. C. Parsons.....	Fairmount, N. Y.

Domestic Manufactures.

E. L. B. Curtis.....	Ithaca, N. Y.
Edward Wemple.....	Fultonville, N. Y.

Fruits.

D. Batchelor.....	Utica, N. Y.
E. J. Potter.....	Knowlesville, N. Y.

Flowers.

P. R. Quinlan.....	Syracuse, N. Y.
E. W. Hopkins.....	Little Falls, N. Y.

Implements.

James L. Ingalsbe.....	South Hartford, N. Y.
John E. Cady.....	Freeville, N. Y.
J. S. Cooley.....	Canandaigua, N. Y.

Abstracts of Treasurers' reports of the County Agricultural Societies.

COUNTIES.	Balance from 1882.	Receipts.	Premiums.	Expenses.	Balance to 1884.	REMARKS.
Allegany.....	\$283 79	\$1,633 71	\$616 75	\$1,348 39	*\$47 64	Purses, \$534.54.
Broome.....	.....	3,535 55	2,185 50	1,350 05	5 70	
Cattaraugus.....	58 89	1,706 38	1,038 70	740 70	25 87	Purses, \$506 50.
Cayuga.....	145 42	4,967 92	2,347 01	2,819 15	*52 82	Purses, \$1,269.76.
Chautauqua.....	291 58	3,080 81	1,949 65	970 87	451 87	
Chemung.....	.....	.....	.....	.....	.....	Incomplete.
Chenango.....	.....	.....	.....	.....	.....	Incomplete.
Columbia.....	1,391 53	2,749 10	1,012 75	1,020 21	2,107 67	Improvements, \$334.41; Purses, \$464.
Cortland.....	25 50	4,015 48	2,945 00	1,095 98	.....	Improvements, \$770.
Delaware.....	.....	736 85	501 94	391 98	*157 07	
Dutchess.....	.....	4,530 21	1,706 00	2,603 60	220 61	Purses, \$658.
Erie.....	202 06	3,658 44	2,039 90	1,268 08	552 50	Purses, \$485; permanent improvement, \$674.52.
Essex.....	19 22	1,531 62	615 03	931 00	4 81	Land, \$500; Purses, \$275.
Franklin.....	2,170 24	5,523 08	2,561 00	3,401 96	1,730 36	Purses, \$1,420.50; permanent improv'ts, \$1,533.50.
Fulton.....	319 26	9,458 97	3,963 08	5,745 83	69 32	Purses, \$1,483.50.
Genesee.....	.....	2,159 75	1,100 00	781 00	278 75	
Greene.....	19 79	2,578 81	1,423 50	1,006 78	168 32	
Herkimer.....	912 76	2,341 47	1,497 25	1,221 80	535 18	
Jefferson.....	210 94	4,272 68	1,806 25	*1,951 85	725 52	Permanent improvements, \$727.25.
Lewis.....	16 76	3,343 80	974 50	2,376 97	9 09	
Livingston.....	881 45	2,034 11	889 00	1,559 81	466 75	
Monroe.....	20 47	9,746 54	2,512 61	7,154 56	99 84	
Montgomery.....	439 43	2,687 94	1,597 22	1,444 99	85 16	Permanent improvements, \$2,724.67.
New York, American Ins.	26,555 50	44,472 64	1,764 50	31,977 41	37,286 23	Purses, \$439.43.
Niagara.....	80 78	3,557 95	1,986 38	1,352 41	299 44	
Oneida.....	270 18	4,237 61	1,934 25	2,232 34	341 20	Purses, \$693.20.
Onondaga.....	3,803 83	10,611 12	2,703 00	9,391 02	2,320 93	*Includes Dividends, \$4,006.
Ontario.....	.....	3,368 63	1,562 30	1,215 17	591 16	Permanent improvements, \$250.
Orange.....	1,638 21	7,092 39	2,529 00	3,532 45	2,669 15	
Orleans.....	1,263 26	1,679 44	1,313 25	2,630 45	805 50	Permanent improvements, \$713.84.
Oswego.....	.....	3,454 96	1,199 96	2,225 00	.....	Permanent improv'ts, grand stand, etc., \$1,034.15.
Otsego.....	70 11	3,142 44	1,096 79	1,491 23	24 53	Purses, \$455.16.
Putnam.....	102 57	1,773 18	707 75	1,038 37	129 63	
Queens.....	352 37	12,121 59	5,851 75	4,903 25	1,718 96	
Rensselaer.....	1,167 65	2,793 25	962 00	1,444 26	1,555 64	
Rockland.....	28 05	703 70	460 60	248 60	22 50	Purses, \$320.50.
St. Lawrence.....	Old debt to sinking fund.	5,118 14	2,961 25	1,658 13	498 76	Purses, \$1,520; permanent improv'ts, \$232.21.
Saratoga.....	34 12	3,636 40	844 45	2,719 70	106 37	
Schenectady.....	.....	1,143 15	252 50	409 97	480 68	

Schoharie	198 84	6,188 54	1,303 50	4,896 81	387 07	Purses, \$650.
Schuyler.....	844 26	7,266 04	788 73	6,828 97	492 60	Incomplete.
Seneca.....	504 17	4,552 82	1,987 00	2,736 69	333 30	Permanent improvements, \$4,688.18.
Steuben	4 47	2,830 51	854 50	1,145 87	834 61	
Suffolk	332 52	1,184 79	662 70	668 13	86 48	Permanent improvements, \$300.
Sullivan.....	107 47	1,181 19	831 66	506 20	*49 20	Permanent improvements, \$1,322.34.
Tioga.....	33 66	5,808 11	1,678 50	4,163 27	7 83	No fair.
Tompkins.....						
Ulster.....	774 64	2,575 00	1,245 25	1,615 17	489 41	
Warren.....	1,169 67	4,948 51	1,867 00	1,797 61	114 23	
Washington.....	95	1,401 54	546 50	805 63	50 36	
Wayne.....	1 81	1,055 54	325 00	415 10	317 25	
Wyoming.....	4 09	1,418 74	582 15	825 62	15 06	
Yates						

Abstracts of Treasurers' reports of Madison County Town Societies.

Hamilton.....	\$361 46	\$1,269 32	\$778 05	\$627 02	.....	Not received.
Brookfield.....		2,599 37	787 51	1,769 11	.....	Purse, \$327.50; permanent improvements, \$700.
Lenox					\$42 75	

Indian Agricultural Societies.

Allegany.....	.....	.....	\$105 85	.....	.....	*\$125 85
Red House .....	.....	\$230 00	.....	\$250 00	.....
Cattaraugus .....	.....	824 51	.....	435 26	.....	120 55
Iroquois .....	.....	391 66	243 00	148 66	.....
Onondaga.....	.....				.....	Purses, \$108.

* Denotes debit balances.

BULLETIN NO. 7. — MAY, 1883.

NEW YORK STATE AGRICULTURAL SOCIETY, }
ALBANY, *May* 23, 1883. }

In the following table are given the answers received from 555 correspondents to the questions proposed in a circular sent out on the 1st inst. The replies are mostly dated May 3 to 12. The issue of the circular was delayed on account of the lateness of the season. Thanks are rendered to the correspondents who have contributed the information now presented.

CROPS NOT MENTIONED IN THE TABLE.

OATS. — Increased acreage is reported by correspondents in the following counties (one in each county except as noted): Erie, Monroe, Livingston, Wayne, Ontario (2), Tompkins, Onondaga, Chenango, Montgomery, Otsego, Schoharie, Herkimer, Steuben, Delaware, Jefferson (4), and Warren; decreased acreage by one correspondent in St. Lawrence.

BEANS. — Increased acreage, Orleans, Monroe, Wyoming (2), Oswego, Essex (2); decreased acreage, Livingston, Wayne.

ONIONS. — Increase, Oswego, Chenango, Schoharie; decrease, Monroe.

AMBER CANE. — Increase of this crop is reported from Erie, Niagara, Ontario (2), Yates (2), Cayuga, Tompkins (3), Oswego, Orange, Chautauqua, Steuben, Sullivan, Jefferson.

SPRING WHEAT. — Increase in Wyoming, Oswego, Madison, Jefferson (2), St. Lawrence (2).

PEPPERMINT. — Two correspondents in Wayne refer to the decrease of this crop.

SMALL FRUITS. — Increase in Erie, Yates, Oswego.

GRAPES. — A large increase of area in vineyards in the Lake Keuka district is reported, and the vines are said to be in very thriving condition. Also on Canandaigua lake.

TOBACCO. — Decrease, Steuben, Chemung (8), Onondaga (2), Putnam; increase, Tioga, Onondaga (2).

FORAGE CROPS. — Increase very generally reported, including fodder corn, roots, cabbages, millet and Hungarian grass. Also of cabbages for the seed in Suffolk, and of peas and beans, for seed, in Jefferson county.

FLAX. — Two correspondents in Rensselaer mention a decrease.

MAPLE SUGAR. — The crop is a failure throughout the State.

Counties in 5 groups.	Question 1. What is the con- dition of winter grain in your vicinity?			Question 2. How much more, or how much less, winter grain sown last fall, than in fall of 1881?			Question 3. What is the condition of meadows:			Question 4. Is the season thus far fa- vorable or otherwise?				Question 5. Is there likely to be more or less acreage this year than usual of any of the following crops:				Question 6. Will the No. of cows in your vicinity be greater or less than last year?			Question 7. Has there been any consid- erance of abor- tion this sea- son?		Question 8. Will the num- ber of sheep to be shorn be greater or less than last year?			Question 9. Is the spring's produce of lambs good or otherwise?	
	Very good.	Good.	Poor.	Very poor.	Much more.	More.	About same.	Less.	Much less.	a Of those b Of those c For		Favorable.	Unfavorable.	More.	Equal.	Less.	Greater.	Equal.	Less.	Yes.	No.	Greater.	Equal.	Less.	Average.	Good.	Poor.
										seeded in 1882?	seeded be- fore 1882?																	putting in crops	grass?	fruit?	a Of barley? b Of pota- toes?
Erle.....	4	10	6	3	1	1	16	4	...	15	9	...	...	12	11	1	5	4	11	1	22	2	4	11	6	6	5
Niagara.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Orleans.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Genesee.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Monroe.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Livingston.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wayne.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ontario.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yates.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seneca.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cayuga.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tompkins.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Schuyler.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Onondaga.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oswego.....	4	8	3	...	4	...	7	1	...	9	2	...	...	10	2	...	...	...	...	1	11	2	2	7	3	8	1
Cortland.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chenango.....	2	1	5	...	...	1	3	...	...	2	3	...	...	3	...	...	...	...	...	...	3	1	1	1	3	3	1
Madison.....	1	3	2	...	...	...	10	...	...	8	4	...	...	2	...	...	...	...	...	...	4	...	...	...	...	...	...
Oneida.....	2	4	2	...	2	...	6	...	...	9	1	...	...	10	...	...	...	...	...	...	9	3	3	6	9	4	...
Fulton.....	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Montgomery.....	2	10	...	...	1	...	5	...	...	8	1	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...
Otsego.....	3	11	2	...	...	2	11	...	...	12	16	...	...	12	...	...	...	...	...	...	11	...	...	...	...	...	...
Schoharie.....	...	...	...	...	...	...	6	...	...	15	10	...	...	5	...	...	...	...	...	...	10	...	...	...	...	...	...
Herkimer.....	6	7	3	...	2	3	10	...	1	15	19	...	...	3	...	...	...	...	...	...	19	...	...	...	...	...	...
Washington.....	5	7	...	...	...	...	5	6	...	9	...	...	...	10	2	...	...	...	...	...	12	...	...	...	...	...	...
Saratoga.....	1	3	1	...	...	2	2	1	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Schenectady.....	1	1	...	...	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rensselaer.....	...	...	...	...	...	...	7	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Albany.....	4	4	...	...	...	...	8	1	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Columbia.....	3	6	1	...	...	1	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Greene.....	...	...	...	...	...	...	3	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dutchess.....	3	1	...	...	...	...	6	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

EXTRACTS FROM CORRESPONDENCE.

Erie Co., L. G. KELSEY, Marilla. The winter wheat that looks well is that on which phosphate or guano was used. More sweet corn and tomatoes will be grown, for the canning factory, than in former years.

——— JOHN KRAUS, Clarence. Wheat on high, dry land is mostly injured, that on low land, somewhat sheltered, looks fair. Bees have wintered better this season than for several years past.

Niagara Co., L. H. HILL, Lockport. The principal topic of conversation among farmers is the fruit insects. The aphid covers the buds in large numbers. Some growers are using whale oil soap, some potash water, some kerosene oil churned with sour milk and diluted with water.

——— L. SHARP, Lockport. The apple aphid has destroyed the fruit crop in this county for the past four years. The orchards are covered with them, every blossom bud having from five to a hundred on it. The prospect for an apple crop was never better were it not for this.

——— JOHN P. SAWYER, Gasport. The most effectual remedies yet discovered (for the apple aphid) are tobacco water or tea, and an emulsion made of one part of sour milk and two parts of kerosene oil, diluted with sixteen times as much water, to be applied in the form of spray.

——— JOHN L. BEARDSLEY, Hartland. Having lived in this county most of the time for forty-eight years, in my judgment, wheat looks much poorer than any year in that time. On sandy soils it looks better than on clays.

Genesee Co., E. TOWNSEND, Pavilion Centre. The best crop in this section is thoroughbred American merino lambs. Have just sold ten to go to Australia, at from \$500 to \$1,000 each.

Monroe Co., A. J. GALLUP, Clarkson. The prospect for apples in this vicinity is very slim. The buds are few on trees of this year's bearing, owing I think to the debilitated condition of the trees, which were infested with the aphid last season, preventing the formation of fruit buds. The buds are just putting forth and are covered with the aphid now. The peach crop may be good on healthy trees, but most of the trees, after four or five years, become diseased with the yellows and die. Unless some remedy is discovered the cultivation of peaches will have to be abandoned. Plums and cherries are late but may do well. Small fruits promise well at present.

Livingston Co., J. W. SICKLEY, East Groveland. Wheat suffered by a coating of ice, the last of winter, that froze some fields to death, killing not only the top but the root. On the whole, the crop is looking quite as well as a year ago and, with warm rains, there is enough left to make a fair crop.

——— J. S. BEECHER, Livonia. Some fields of wheat promise a fair yield and some are being ploughed up and other crops put in. The ice of last winter and the constant north winds this spring have been too much for the wheat. Some favorable change may take place but I think a good crop cannot be made now.

Wyoming Co., P. C. FARGO, Warsaw. This vicinity is rapidly growing into prominence on account of the salt found underlying this valley, eighty feet in thickness of solid crystal salt. Five wells are already down and others are in progress. Several car-loads are shipped daily. Real estate has advanced from fifty to seventy-five per cent in a few months.

——— J. O. MCCLURE, Warsaw. An examination of the fruit trees shows them to be in excellent condition, and the apple and pear crops, with the smaller fruits, promise well in Wyoming county.

Wayne Co., GEORGE W. MARSHALL, Palmyra. I am of the opinion that the loss of the clover crop for the last three years has much to do with the feeble and unfavorable appearance of the growing wheat. Last year, if I remember right, I put the average yield of wheat, in this section, at eighteen bushels, and the result proved this to be nearly correct. This year I am obliged to estimate it at twenty-five per cent less with favorable weather. If unfavorable it will not reach my estimate.

Ontario Co., HARVEY STONE, Reed's Corners. With as favorable a season as last year we may gather as abundant a harvest of wheat.

—— C. P. WHITNEY, Orleans. Wheat killed out where ice formed on the fields. Where phosphates were used it stood the winter better and is coming on. The difference is very noticeable. I think we may expect one-fourth less wheat than last year.

Seneca Co., R. J. SWAN, Fayette. Clover sown in the spring of 1882 looks well and promises all over to be a good crop in this section of the State.

—— C. J. HAMPTON, Junius. Wheat on the uplands (ridges) has been badly injured by the winter. On low lands it is promising. This is a reversal of the usual condition in spring. The stand of young clover is very good.

Tompkins Co., EDGAR BREWER, Enfield Centre. Winter wheat has seldom looked so badly the 20th day of April as it did this year. Much of it entirely killed — not frozen out, but killed early in the winter by severe cold when the ground was dry and no snow. The fields that have a protection or shelter from the south winds are the best, which is a very unusual thing for this region. For the last eight days (to May 7th) it has improved very much, owing to light rains and south winds. Should the latter part of May and June be as favorable as last year, nearly an average crop may yet be harvested.

Amber cane is growing in favor with farmers, none raising a large quantity, but many enough to make syrup for family use.

The high price of veal calves induces many farmers to keep fewer of them than formerly. In the end this will prove detrimental, as there is not more stock now reared than is profitable.

—— E. L. B. CURTIS, Danby. The cultivation of amber cane is receiving much attention. A superior quality of syrup and molasses can be obtained at about half the cost of the best New Orleans. There seems to be some difficulty in getting sugar of good quality, but some have made a fair article.

Oswego Co., SCHUYLER RHODES, Scriba. This is mostly a fruit-growing town; apples, pears, strawberries. The decrease in cows is owing to the white grub eating the pastures very badly, and there have been few calves reared during recent years.

—— H. M. BARD, Mexico. A good many farms changing hands this spring at an advanced price.

Oneida Co., W. W. TIBBITTS, Knoxborough. We never had a more favorable fall, winter and spring, so far, for grass and winter grain. They were well protected by snow. With good warm showers we cannot fail to have a good crop of hay and abundant pasture. Hops wintered well.

Otsego Co., JAMES F. CLARK, Cooperstown. Hopyards that were good last year are good this; but those that were poor last year are very poor this. They were more backward last year than I ever saw them, but they are now a week behind last year according to my diary.

Schoharie Co., M. S. WILCOX, Jefferson. The low price of butter has induced farmers to raise more calves and pigs. The increased number of calves will be considerable.

Herkimer Co., C. P. MILLER, Mohawk. More hay than usual left, and I think a good deal of oats and potatoes in the country. We are using more phosphates, and with better implements raising better crops. A large number of large basement barns put up within two years, and a number to be built this season, with occasionally a silo.

Washington Co., A. G. MEIKLEJOHN, Putnam Station. More than the usual mortality with bees wintered on the stand. Little or no ploughing done last fall for the want of rain to soften the ground, and the season is so short for putting in crops now that the acreage will be fifteen per cent short. Oats and peas are the grains chiefly grown in this section.

Albany Co., P. K. DEDERICK, Albany. The fact of the season being so backward that grass has hardly started, I consider favorable to the hay crop, provided there is no long-continued dry weather in June; and in any case it is not likely to

prove detrimental. As far as I can learn, throughout the northern States the prospect for a hay crop is good, and, unless affected by dry weather later, the straw crop will also be good. These two crops I am particularly interested in, and keep posted through customers and agents as well as I can.

Dutchess Co., NEWTON REED, Amenia Union. The production of milk for New York, which is condensed at Wassaic, is the chief thing on all the farms here. Good crops of corn and oats are raised and fed to the cows. Less wheat. On about eight or ten farms ensilage of sowed corn was tried with apparent satisfaction. It proved hurtful to condensed milk, and is no longer fed for that product. Hungarian grass has proved to be an excellent food for the production of milk. It is easily grown, and the use of it is increasing.

Orange Co., ROBERT ASHBY, Walden. I live four miles from Borden's milk condensing factory, and within a circle of eighteen miles diameter it has revolutionized the farming business. Every farmer is selling his milk to the "condensery," and the feed of the cows (very nearly all of it) is purchased and brought from the West.

——— HENRY E. ALVORD, Mountainville. The continued extension of the acreage in peach and pear orchards and all kinds of small fruits, a decrease in the acreage of cultivated farm crops, and the reaction from excessive milk production, are the chief features as to change in the farming of this portion of Orange county.

——— WILLIAM D. BARNS, Middle Hope. From Cornwall to Kingston, about forty miles along the Hudson river, fruit growing is the leading pursuit for a distance of five or six miles from the river. The continuous cold of the winter and the damp and backward spring are thought very favorable for the production of a very heavy crop of all kinds of fruit. In a few localities, I have heard of peach trees, standing in low valleys, being injured and their fruit buds killed, but on the whole the prospect is that the peach and grape crops will this year be by far the largest ever grown in the district above described.

A few small creameries have been established to enable the fruit growers to make more manure and to get some payment for the feed and trouble, but the milk is entirely subservient to the fruit.

Steuben Co., W. B. PRATT, Prattsburg. Maple sugar crop a failure. The fact that trees standing on damp ground, or bordering on a rivulet, yielded fairly, favors the theory that the general failure had its origin in the drought of the autumn and winter in connection with the steady cold. Fair yields of clover seed were obtained last year from the large kind, but only light crops from the medium, which blossoms in the second growth a little later in the season.

——— O. F. MARSHALL, Wheeler. Since we have fed bean pods to our sheep they have never done better. So far as ewes have dropped lambs this spring, all are strong and healthy.

Chemung Co., W. A. ARMSTRONG, Elmira. As to wheat, many observers report the loss fully one-half. Some fields of superior promise last autumn have been ploughed and sown to other crops. Losses have seemed to be caused wholly by exposure through a long winter without snow covering. Hops will be planted more than ever before, not because the price has been high, but because of discouragements in tobacco farming.

Tioga Co., STEPHEN DARBONNIER, Berkshire. Commercial fertilizers are in greater demand; there is more grain fed to cows than formerly; the practice of killing calves as *deacons* has disappeared, many veals are shipped from this section; more hay is baled and shipped; cattle are scarce; wages of farm laborers higher than last year.

Broome Co., ROBERT HOGG, West Chenango. Stock is growing less, and the hay is being pressed and sold, this business increasing until now we have eight presses working, most of them by steam power, to their full capacity. The dry season of 1881 killed a great many young trees in the woods and last year added to the number.

Sullivan Co., P. R. PELTON, Monticello. Meadows in very fine condition. Cows very scarce and high, the cause, more going into the creamery business. The Fair-lamb system is working very finely.

Lewis Co., B. B. MILLER, Lowville. Hops have wintered well, both old and new yards. Grass, and especially clover new seeded, is looking the best for years. A large acreage of potatoes will be planted, and the use of phosphates is increasing rapidly on hops, potatoes, corn and grain.

Jefferson Co., A. P. SIGOURNEY, Watertown. The indications are that the leading changes in the policy of producers in this county will be : 1. The reduction of creameries and increase of cheese factories. 2. Larger planting of fruit trees and small fruits. 3. Much less raising of seeds. 4. Less clover will be sown, the extravagant cost not warranting the outlay. 5. The few experimenters with ensilage, in our county, dislike to admit a failure, yet observing farmers, judging from the condition of stock fed upon it, decline to adopt the system.

St. Lawrence Co., L. CRAMPTON, Pierrepont. The grass crop looks as though it would be very good, but backward. Farmers are getting in the way of raising their own grain for feed, mixed oats, barley and peas. Considerable corn grown, and about as good a crop as we can grow. Some sowing of millet for fall feed.

——— C. A. WOOSTER, Hammond. The spring is a very favorable one for winter grain and meadows ; fall-ploughed land in splendid condition for spring crops. With a fair supply of rain we are in shape for the best crops in years.

——— N. M. CURTIS, Ogdensburgh. The condition of crops, land and stock is, as a whole, better than last year, and the outlook encouraging.

Essex Co., WALTER MERRILL, Port Henry. It was so dry in this locality last season that farmers were unable to do the usual fall ploughing ; that is the reason there was no more winter grain sown last fall. The ploughing has to be done this spring, and, therefore, I do not think there will be any more grain put in than in 1882.

Warren Co., NELSON HULL, Glens Falls. Grass and winter grain have wintered better than for several years. There has been an unusually favorable time to put in spring grain and seed. Very fine rains within a few days.

BULLETIN NO. 8. — AUGUST, 1883.

NEW YORK STATE AGRICULTURAL SOCIETY, }
ALBANY, *August* 16, 1883. }

On the 30th of July a circular was issued requesting answers, to be mailed August 6, to the questions printed at the head of the table occupying the two following pages. To this circular, 435 replies were received in time to be tabulated.

In the table the arrangement of previous bulletins is followed, giving under questions 1, 3 and 4 the number of more or less favorable or unfavorable replies, and under question 2, the means of the estimates of the yield of each crop given by the respondents from each county. These are to be considered in connection with the reports of increased or decreased acreage of the several crops given in bulletin No. 7, issued in May.

Thanks are rendered to the correspondents who have contributed the information now presented.

On account of the season having, so far, been a remarkable one as regards weather, temperature and extremes of success and failure, it has been thought worth while to give a much larger number than in former bulletins, of extracts from the observations of correspondents. It is hoped that these may be acceptable, not only as part of the chronicle of the agriculture of the year, but as giving to the farmers of the State some information as to what is the condition of things in the counties and districts of the State other than their own.

REPLIES TO CIRCULAR NO. 2. — SUMMER OF 1883.

[illegible]

EXTRACTS FROM CORRESPONDENCE.

Erie Co., E. W. STEWART, Lake View, August 6. This has been the wettest season of my remembrance — only one week without rain in three months. This has kept pastures fresh, but the grass has been too watery to produce the best milk ; butter not of as good quality as in seasons of less rain. Heavy land was too wet to get in spring crops in good season, and it is probable that late oats will rust so badly as to be of little value. Corn was planted late and much of the seed rotted in the ground. Apples and pears seem to be almost a total failure, but the berry crop is large. The aggregate hay crop is about twenty-five per cent less than last year.

——— L. G. KELSEY, Marilla, August 3. There has been so great a quantity of rain this season that it has been a damage to most crops, but for two weeks there has been no rain to speak of and the rust has struck the potatoes in some places, also the tomatoes. Some farmers are cutting oats to save them from spoiling.

——— V. R. CARY, Patchin, August 6. It now appears that the potato crop will be greatly injured by rot.

——— W. H. ESTES, North Collins, August 6. Hops have been injured badly by the grub this spring.

Niagara Co., E. D. ROBINSON, Lockport, August 6. A very late, cold, wet harvest. Barley is badly colored by heavy dews and rain ; wheat rusted and shrunken ; oats looking fine. A good many farmers sowed oats on their wheat land when they sowed grass seed this spring. I never saw a better catch of grass seed. No wheat drawn into barn yet and very little barley.

——— A. C. JOHNSON, Wilson, August 6. There is a good prospect for a large crop of clover seed unless it grows too rank to fill, and a fair prospect of a good many apples, nothing like the crops we used to raise years ago, but more than we have had the last three years. Peaches are a fair crop and promise to be good. Farmers are just in harvest, and the general remark is that, come to get into it, wheat is not as good as it looks, and quality very poor, especially white wheats.

Orleans Co., D. H. PARTRIDGE, Holley, August 1. We have the poorest wheat on what is termed the best wheat land. Oats will be a wonderful crop. Beans, one-quarter less acreage than in 1882, badly damaged by wet, and many planted very late. Apple crop very poor, one-fourth of usual crop. Pear and quince crops light.

——— JAMES H. PERRY, Ridgeway, August 1. A larger acreage of root crops grown than ever before, and they bid fair to yield largely. Apple crop very light, and not very promising as to quality. Peach crop an average unless injured by the wet weather.

——— H. BOWEN, Medina, August 6. Season so wet that the hay crop has been secured in not very good condition, especially clover, which made great growth, fell down badly and soured at bottom before cutting.

Monroe Co., D. E. ROGERS, Scottsville, August 1. I think we are harvesting the poorest crop of wheat ever grown in this town or section, as to quantity and quality combined. There is a great growth of clover this season, more than for many years.

——— F. B. SHEARER, Pittsford, August 4. The summer has been too wet, and overgrowth of oats and barley, the crop badly down ; wheat somewhat rusty but generally plump. The seeding is good, a good prospect for hay next year.

——— ANDREW J. GALLUP, Clarkson, August 6. The season has been a peculiar one. Wheat wintered well, did not heave out by the frost. The plant was small but seemed all right, early in the season, but the early drought and cold weather checked its growth. Later it was too wet for it, consequently it was thin on the ground, the lightest and poorest crop we have had here in six years. The extreme wet and cool weather has been an injury to all crops except oats.

——— F. W. LAY, Greece, August 7. Apples and peaches almost a failure. Grapes better than usual.

Livingston Co., B. F. ANGEL, Geneseo, August 1. The season has been rainy and spring work was consequently late and unsatisfactory. Lately the weather has improved but the wheat has not all been harvested yet. The crop is somewhat better than it promised in early spring, and the average will be about half of last year. The hay crop is very heavy, but, as is always the case in wet summers, not of as good quality as usual.

——— JOHN GILMAN, Scottsburgh, August 6. Our winter wheat was an entire failure, but the spring crops are looking fine, much of them sown on ground where wheat had been ploughed up. Beans are especially good in this town.

——— THOMAS ELLIOT, Moscow, August 6. A very wet spring and corn was got in late and suffered with wet after it came up. It is spotted and uneven. A good many beans are grown here; like the corn they were got in late and are not looking as well as usual. The apple crop is looking poor, many orchards were affected by the canker worms. Peach crop good.

——— G. D. MERCER, Geneseo, August 10. The continued wet weather in the fore part of the season has been very beneficial for the hay crop and spring grass-seeding, the latter never was better. The rains and cold nights have been hard on beans and corn. Potatoes bid fair to be an extra crop as to quantity and quality.

Wyoming Co., G. H. DUNHAM, Johnsonburgh, August 1. The season has been so wet the haymakers are not half through yet. There will be a surplus of hay in this dairy region. Not since 1869 has the labor of getting the crop been so difficult.

——— J. F. THOMAS, Varysburgh, August 2. The season has been very wet, the worst, I think, in this respect, since 1869. Pastures are injured by being trodden by the cattle. Quite a quantity of hay yet to cut.

——— C. A. BRADT, Castile, August 2. Beans will be a good crop, apple crop almost a failure, wheat somewhat damaged by rust. Young cattle and good horses are scarce and high. Price of farms \$75 to \$125 per acre. Some cheese being made, mostly butter.

——— G. G. PERRY, Eagle Village. There has been so much rain that on hard-pan land the crops are almost a failure, except grass. Acres and acres of potatoes, corn, barley and oats are completely drowned out, not worth harvesting.

——— C. D. FARMAN, Hermitage, August 5. A first-rate crop of grass except on wet lands. Oats are very heavy, some pieces will go seventy-five bushels to the acre. A big growth of potatoes, which have begun to rust and rot; one-third more planted this year than last. Flax is first-rate. No fruit to speak of but berries.

——— P. C. FARGO, Warsaw, August 6. The last eight weeks have been very embarrassing to the farmer in this section, so much rain that it has been almost impossible to save the hay even in a poor and damaged condition, and much is yet to be got; many fields are too soft to work the mower. Wheat is somewhat injured by rust, but a small portion is as yet secured, and many fields are yet to be cut. There are some complaints of growing wheat and yet it rains almost every day. Beans were largely planted, but wet and cold have spoiled fully one-third — one-half of the remainder will not be more than half a crop, the remaining third bids fair for a big yield if not hurt by rust. Apples, a short crop. Pastures as green and tender as the first of June.

Wayne Co., GEORGE W. MARSHALL, Palmyra, August 2. Tremendous and frequent rains have nearly destroyed the corn and potato crop. Much wheat has been secured in poor condition, while a large part remains out exposed to rains, more or less every day. Some grown wheat is already reported.

Ontario Co., THERON VAN AUKEN, Phelps, August 1. We have the poorest crop of wheat in this town that we have had for many years. Barley indicated a heavy yield, but on handling is found lighter. Oats still green, a good many smut heads, but will be a fair crop. Pastures were kept tender by the excessive wet and have been eaten very close. Corn was planted late on account of wet, and will need a favorable August to secure a crop. Potatoes the same. Fully four-fifths of our wheat was cut and bound with twine binders working finely.

—— HARLEY HAMLIN, East Bloomfield, August 1. New meadows very heavy, old light. Wheat, rusty and badly shrunk. Barley, heavy growth, badly down, may be shrunk. Oats, large growth and looking fine. Owing to late planting, corn is still backward but growing finely. Potatoes, an increase in acreage, looking healthy, with a good prospect.

—— J. S. DORMAN, Billsborough, August 1. Our season has been very wet, and a good deal of hay was injured. Winter wheat stood very thin on the ground, and will not be of good quality, though some fields are nice. Barley promises a splendid crop. Apples almost a failure, not one-quarter of our ordinary crop. Peaches and plums one-half.

—— SIDNEY D. JACKSON, Clifton Springs, August 2. Plenty of pasture everywhere. Perhaps for sheep we have had almost too much rain for them to do well even on uplands. The outlook for every thing but wheat is good — wheat is very poor, in quality as well as quantity. Corn in most places, in uplands, looks well, but we cannot expect much of a crop unless the weather changes.

—— A. MARVIN WILBUR, Victor, August 2. Taking all things into consideration crops are exceedingly good in this section, with the exception of wheat and apples.

—— CHALES COOLIDGE, Phelps, August 2. Wheat somewhat shrunk. Barley colored considerably by the rains. Oats, none cut yet, but never saw better. Potatoes look usually healthy, some complaint of the potato borer. Apples generally a light crop. Peppermint, acreage small but looking well.

—— LEVI A. PAGE, Seneca Castle, August 6. Wheat was very thin on the ground — we had too much wet in June, the rust came on it and the quality is very poor. Barley is full as good as last year, but has not been secured in as good order. Oats are a good crop. Potatoes the best in some years.

Yates Co., N. H. GREEN, Rushville, August 7. A good deal of the winter wheat had but little top last fall, and winter-killed badly. Contrary to the general rule, wheat on lowlands in this vicinity was the least winter-killed and has been less affected by the extreme wet season than might have been expected. Old meadows seem to have been damaged by the wet, but the crop is large. Last year's seeding has turned out a large crop of grass, and this year's seeding is very fine — no failures heard of. Barley is going to be a good crop, and with the present prospect will be secured in good condition. A large share of the wheat crop has been secured and some barley. Most of the hay has been secured in very good condition. The greatest drawback to the corn crop has been the lack of proper cultivation. For two weeks when corn needed cultivating, it was so wet that farmers could not get in their fields at all.

—— JAMES MILLER, Penn Yan. To the same effect as Mr. N. H. Green, and adds: Potatoes and corn did not come up well. Corn is very late and much of it weedy. Potatoes will not be an average yield per acre, but as more were planted than in recent years, the crop with favorable weather will be as large as usual.

—— JOHN N. MACOMB, Branchport, August 7. Favorable weather will give a large and fine crop of sorghum, the breadth is larger than ever. Some grape growers report mildew and rot. In my observation the crop will not be much shortened from this cause. The vines have not set quite as heavily as last year. The crop of grape cuttings is unusually large and very promising.

Seneca Co., M. B. RITTER, Waterloo, August 3. Wheat all out yet and growing in the shock, raining every day. Barley not cut and badly down and colored. Some oats badly down with heavy growth of straw. Wheat the poorest I ever saw in this county, some not going to be cut at all, a good deal uncut yet — the quality will be very poor. Potatoes a wonderful growth, and seem to set well.

—— WILLIAM BRICKLEY, Fayette, August 6. The season has been too wet for corn, barley and potatoes; very good for grass. Wheat did well considering the condition it was in in the spring. The fruit crop is very light.

—— C. J. HAMPTON, Junius, August 8. Junius has the lightest wheat crop harvested in twenty years. Barley below last year in quantity and quality.

——— L. J. CROWELL, Seneca Falls, August 9. Extreme wet all of the season has been against grain crops and damaged much hay in the getting. Midge, rust and very late ripening have reduced the wheat crop much from the estimate of last report.

——— DIEDRICH WILLERS, Jr., Varick, August 4. Wheat harvest is now in progress and considerable acreage remains to be cut. In some cases farmers refuse to cut some of their wheat, not believing it worth the expense of harvesting and threshing. The ground is so wet that reapers work with difficulty, and in some cases it is necessary to use four horses. The harvest is a week later than last year and fifteen to twenty days later than in prosperous years. A little six-rowed barley has been cut, and oats and two-rowed barley will be fit to cut in a week or ten days. In many cases farmers will not have more than seed and bread from their wheat crops of ten to twenty-five acres. The bean crop is injured by wet weather, and there will be far less than usual—less, considerably, was planted than last year. Labor scarce and wages unusually high.

——— J. R. WHEELER, Farmer Village, August 6. The height of this locality between the lakes has, no doubt, much to do with the condition of our crops, and the rainy season has not affected them as in the low lands. On level lands the corn crop is almost an entire failure. The stand of wheat in the shock in this locality is about as three to seven compared with last year, and it is of inferior quality. The oat, barley and potato crops may be fairly considered as I have reported (barley thirty-five bushels, oats forty-five bushels, potatoes unusually good). Apples almost an entire failure. Peaches promised well, but are dropping. Pears and small fruits are quite abundant. It is the opinion of many farmers that the dry weather of the three previous years deprived fruit trees of their usual growth and affected their vitality. This season has shown a fine growth in fruit trees.

Cayuga Co., J. J. THOMAS, Union Springs, August 1. Although not included in the questions of your circular, the undersigned respectfully suggests the propriety of inquiring into the condition of the public roads, which are under the management of farmers. In riding through this county (and it is nearly the same elsewhere) an observing person cannot but be struck with the handsome, smooth and neat condition of the farms and the luxuriance of the crops, contrasted with the shabby appearance of the highways, where weeds abundantly encumber each side of the track, and loose and fixed stones greatly retard traveling and bringing produce to market. It has been estimated that in a single township the damage occasioned by loose stones in the roads, all of which might be removed at a cost of \$20, causes a yearly loss of many hundreds—in some instances thousands—by the wear and breakage of waggons and harness and chafing of teams. No one thing so easy to be attended to would do more to improve the character of the country than a thorough reformation in this respect. It may not be out of place to add that a very bad practice, generally adopted, is that of drawing or scraping sods, muck, and rich soil generally, into the middle of the road, to form what is called a *turnpike*, which in all wet seasons becomes in most places an almost impassable mass of deep mud. Hence the common remark in speaking of the worst roads is that they have been mended.*

——— O. HOWLAND, Owasco Lake (Auburn P. O.), August 6. One-quarter to one-half of our hay is out yet and three-quarters of the wheat. The cool weather has kept the wheat from growing, I think. Barley is a large crop and bids fair to be of good quality—none housed yet. Oats stand well, leaves rusty, the general run will be lacking in weight. Corn is very late and half of it cannot mature if we have frost before October. Potatoes good where cared for, if they do not rot. The rains have caused neglect of corn and potatoes.

——— HOWARD TRYON, Fleming, August 2. There seem to be a great many false kernels in barley this season. The cause, I should say, is that the weather

* Mr. Thomas's remarks are forcible and just, but of far less general application, happily, than they would have been a few years ago. The better way of mending roads, by drawing on broken stone and good, clean gravel, without disturbing the well-trodden, solid road-bed, is far more commonly adopted than formerly, and growing in favor year by year, as conducing to real economy as well as to the comfort of all who use the roads. Much depends, too, upon selecting the most sensible, practical men to serve as pathmasters. A stupid, obstinate man may do more mischief to the roads in one season than can be undone in three.

being so wet it has grown too fast. We have the largest growth we ever had. We have a kind of barley that was sent out two or three years ago by the Department of Agriculture under the name of the Mensury barley. It is six-rowed, and to-day looks better than any thing in this county. Some farmers say they will have sixty bushels per acre, and it stands up much better than the two-rowed kinds.

Tompkins Co., T. BOARDMAN, Trumansburgh, August 3. I think I stated, in answer to former circular, that the prospect of the apple crop was good. It has proved otherwise; the crop is not as promising as last year. The long-continued rains have affected the crops to a greater or less extent all through this section. Much of the wheat sown last fall was ploughed up this spring, and without any doubt it would have been better to have ploughed up more of it, as some hardly paid the expense of harvesting, etc.

——— P. H. CRANDALL, Ithaca, August 4. The wheat crop has been cut and mostly safely housed; now cutting barley and oats. Although occasional showers, the weather has been quite favorable for the past two weeks. Earlier in the season a surplus of rain injured corn and potatoes, and prevented a proper cultivation. The apple crop will be very light; pears less than an average; peaches abundant; grapes seem to suffer from mildew.

——— EDGAR BREWER, Enfield Centre, August 6. The season from May 10 until July 24 was *very* wet, too much so for corn and potatoes. Many pieces were cultivated too wet, and many others not worked but very little. For the last ten days the weather has been very cool, the thermometer being down to 54° twice, 56° twice and 50° once at 5 A. M. As a consequence corn has been kept back, and nothing but warmer weather and a late fall can bring on an average corn crop. There have been frequent showers thus far through haying and harvest, seriously interfering with securing the crops, but still the ground is dry on top, the cool north and west winds drying it very fast. New seeding is looking very fine. The bean crop is very poor as compared with other years.

——— E. L. B. CURTIS, Danby, August 6. Grass has been, and is, abundant; the quality is not so good as last year. Clover promises better than for several years. Should it escape the insect, there will be a fair crop of seed.

Onondaga Co., P. W. BALL, DeWitt Centre, August 5. All grain is in a bad condition in consequence of the continual rain. Wheat and barley are growing in the field before they can be secured. Much wheat is still out and sprouted from a quarter of an inch to an inch. Potatoes are a large yield, but are rotting in many fields, even on upland.

——— J. HENRY SMITH, Fayetteville, August 6. The season thus far has been very wet, so much so that potatoes on the flat and lowlands are almost an entire failure, in fact drowned out. It has also been too wet for hops, the grounds very weedy, which must affect somewhat the yield and quality. In consequence of the fine pastures, dairy cows are doing exceedingly well. I never saw new seeding look better.

Oswego Co., EDWIN PALMER, Parish, August 1. Much buckwheat sown here and prospects of a good crop. The berry of fall wheat has shrunk a good deal this year, especially of the early sown wheat. This is what has reduced the number of bushels to the acre, the straw was heavy. Of fruit, especially apples, there will be a failure. Cows have held out remarkably well in milk. The wet weather has destroyed many hills of potatoes. We are realizing much benefit from the use of phosphates. This year the grain is better where phosphates were used than with barn-yard manure, but we do not expect as lasting benefit from phosphates as from barn-yard manure.*

——— C. V. HARTSON, Union Square, August 4. Last spring the apple crop promised fair, and as this is the bearing year we expected a fair crop. Blight in setting in the spring, and other causes, make the crop a failure with us. All pieces of corn on low ground are nearly a failure.

——— D. E. AINSWORTH, Sandy Creek, August 4. The season has been very cold, wet and backward. All crops in dry, sandy soil are looking well, better

*That depends on how much phosphate you put into your land. There is no waste of phosphoric acid, but it does not grow. You can get back no more than you give.

than average. All crops on cold, wet land, or lowlands, are not up to the average.

——— DAVID L. BROWN, Clifford, August 6. The season (unusually wet and cold) has been in the main favorable for crops on high, gravelly and sandy land. On low, moist lands many crops are almost failures. A fine season for seeding.

——— FREDERICK C. LANDER, Constantia, August 8. The cold and wet season, from early spring and through the summer months, has very materially affected the crops, and the yield will not be so large as in previous seasons, nor the quality as good. Still, a fine, warm fall will yet assist vegetables, corn and fruit. The apple crop is extremely light in this immediate locality. Grapes look well and hang heavy. Pears are more or less touched by blight. Peaches generally look fine, especially the Crawford's. Potatoes are a slim crop. Many have ploughed up their potato patches for other crops.

Cortland Co., JOHN H. HULL, Cortland, August 3. Very wet all the season. Hay crop about half gathered. Other crops are looking well. Think there will be a good yield of potatoes.

Chenango Co., JOHN BANKS, Bainbridge, August 6. Apples are entirely a failure. Fewer than in thirty years.

Madison Co., TRUMAN BAKER, Earville, August 1. All crops, excepting wheat, are looking very well. We are having a very rainy season, consequently are very late about our haying, many in this vicinity have not finished yet. The yield from newly seeded meadows was never better. Pastures are very good indeed, and cattle in fine condition. The apple crop will be very light. Pear and plum trees are loaded. Early potatoes large and good.

——— W. K. PORTER, Cazenovia, August 1. Of corn the stand is good, very healthy color, and of good size considering the cold and wet weather. Should we have good weather during this month and next, with frost holding off late, the yield should be fully up to the average. Other spring crops are remarkably good. Potatoes were never more promising at this season.

——— G. H. BABCOCK, Brookfield, August 1. Hops are looking first class to those only who are not judges. There are hundreds of acres that will not yield a hundred pounds per acre.

——— R. H. AVERY, Canastota, August 1. Pastures, hay, barley, oats and corn will be a full average.

——— J. W. GOODELL, Canastota, August 1. Wheat on uplands, which generally produce the best wheat, will this year hardly yield enough to pay for harvesting. Lowlands have done better.

Oneida Co., W. W. DE ANGELIS, Holland Patent, August 3. July has been a very wet month (fifteen rainy days) and the hay crop, though heavy, has been housed in bad order. Pastures are good to look at, but weak, and cows have shrunk badly. Potatoes will yield well, but will be scabby. No apples. Grapes look splendid.

——— A. F. BRONSON, Vernon, August 3. At this date more than a fourth of the hay crop remains to be cut. The cool weather and frequent showers have delayed haying much beyond the usual season. Oats are ripening slowly for the same reason. Dry stock and beef cattle are fully a month behind in putting on flesh as compared with such seasons as '82 and '81. The apple crop is as nearly a failure as last year.

——— JONATHAN TALCOTT, Rome August 4. Since the 24th of May we have had a succession of rain storms such as is very unusual in this section. Many pieces of corn and potatoes have been badly damaged by the abundant rains. The season, from the date mentioned has been the wettest for the past twenty years, and also quite cool.

——— W. W. TIBBITS, Knoxboro, August 6. Last spring I reported fall wheat prospect first class, but as the season advanced learned that the wheat had been badly smothered out by crust and ice. Fields are spotted with a good growth of straw and fine heads, well filled. We are in the midst of wheat harvest, with very catching weather. Corn fields are looking very poorly, with but few excep-

tions. The season has been so wet that it has been impossible for many farmers to till properly, and keep weeds in check.

Fulton Co., LEVI T. MARSHALL, Gloversville, August 6. The extreme cold of winter was destructive of fruit. There will be partial crops of plums, pears and grapes, but apples are the most decided failure for years. Summer crops of grain have made a luxuriant growth. Wheat and rye were much winter-killed. Well-stocked meadows have produced large crops, and hay will be plenty. Pastures have been good, and the crop of butter and cheese will prove much above the average.

Montgomery Co., W. DOWNING, Randall, August 1. The crops in general are good, only we have more clover and clover-mixed hay than last year. Consequently we shall have very little prime hay.

——— E. G. STORMS, St. Johnsville, August 2. No July within my recollection has been so unfavorable for haying and harvesting. Dairies are in much better condition as to flesh than usual, and are giving fully an average quantity of milk. Fruit, notwithstanding the promise of the spring, proves to be almost a failure.

——— A. VAN HORNE, Fonda, August 6. I think the crops this season, at the present time, are and look better than last year, with the exception of fruit which I know will fall much short of the usual crop. The blight on pear trees is ruinous.

——— P. H. MCCLUMPHA, Fort Hunter, August 8. Hay crop in quantity is good, quality not so good; very little prime hay in my part of the town, most of it is mixed with clover. Wheat very nice where not winter-killed. Oats will be a large crop, not many threshed. Corn backward, but a big growth of stalks. Potatoes will be a good crop, but I am afraid they are going to rot.

Otsego Co., D. C. WANZER, Morris, August 1. Nearly all the hay harvested, generally in good order. Hops are looking fine generally, have been well cultivated, vine looking bright. Fruit crop small, very few apples or pears.

——— N. A. MARCY, Burlington Flats, August 2. The apple crop is almost an entire failure, the few there are are fall fruit. Plums in great abundance. Buckwheat promises a large yield.

——— A. G. MURPHY, Middlefield, August 2. The weather is, at present, unfavorable for hops and they are infested with vermin. This seems to be the general condition so far as I am able to learn.

——— AMOS MATTESON, South Hartwick, August 2. I think the hop crop will be full as good as last year, if not better, notwithstanding the growers say light crops. The season has been very wet thus far and pastures keep good, with a fine growth of after feed on meadows.

——— HENRY K. JARVIS, Cooperstown, August 6. We have had a very wet, cold, summer, and it is quite a wonder that crops are so generally good. I think that taking the crops as a whole there never was a better prospect for the farmers of Otsego county than this year.

——— HORACE M. PIERCE, Cooperstown, August 7. Old meadows have been lighter; those seeded two years better. Wheat is good and I never saw oats look better. Hops are looking well as to vine, and they have blown out very full, but do not come out of the bur as fast as they generally do, began showing over one week ago and are not half showing yet. The lice may injure, and almost destroy them, yet.

——— S. C. ST. JOHN, Edmeston, August 10. Crops in this vicinity are better than last year, excepting old meadows and the hop crop, which at present is not very good, but may come out all right for two-thirds of a crop, 600 to 800 lbs., per acre.

Schoharie Co., N. MANNING, Middleburgh, July 31. Winter grain was badly winter-killed, the severe cold winter also injured meadows. Since seeding in the spring we have had plenty of rain which has insured us good summer crops and kept pastures good.

—— A. R. HUNTING, Gallupville, July 31. While sections north and east of us have had an abundance of rain we have had but little. The meadows looked fine last spring and gave promise of a large yield, but old meadows were nearly a failure. New seeding was benefited by rains which came too late for old meadows. The apple crop is insufficient for home consumption; pears and plums are abundant and fine.

—— H. SCHOOLCRAFT, Schoharie, August 1. It has been very dry through this section during spring and up to about fifteen days ago. Now the rains are bringing corn and potatoes along, and fall feed will be good.

—— A. B. LARKIN, Warnerville, August 6. Rye and wheat all home; oats and barley look to me as good as I ever saw. The weather has been very favorable for haying and harvesting.

—— W. H. MITCHELL, Fultonham, August 6. The fall wheat crop in our valley is almost a failure. Rye on the lowlands is good, and fair on the uplands. Oats will go over the average. We have a much larger acreage of hops than last year, the vine is not heavy, but the quality promises to be good.

—— A. G. BALDWIN, Gilboa, August 9. The hay crop on old meadows is very short, new seeding is fair and fine in quality. Winter wheat killed out, and about half of it was ploughed up. Rye and spring wheat are good crops. Barley and oats very heavy, and so far, corn and potatoes the same. Buckwheat abundant growth and very promising.

—— M. S. WILCOX, Jefferson, August 9. Apples will be a small yield. Small fruit abundant. Buckwheat at present is good, and with favorable weather to fill will give a large yield. I hear many farmers say they have made more butter than last year, and this is true of my own dairies.

Herkimer Co., FRED SMITH, Norway, July 31. A good season for grass, grain and potatoes on moderately dry soil, and a good year for farmers. Cheese rules high and the hop crop is becoming an important item. Eggs have brought an unheard-of price, and nothing has paid better than poultry.

—— JOSIAH SHULL, Ilion, August 1. The hay crop is large, but in consequence of frequent rains during the gathering, the quality is not as good as usual. Potatoes have an unusual growth and if rot does not reduce the crop we shall have more than the average. Apples are very few, doubtful if enough for home supply.

—— MILO MOORE, Russia, August 1. Crops are good of all kinds; pastures fine, heavy showers almost every day; aftermath, will be good. Cows are giving a large flow of milk.

—— BYRON PAINE, Jordanville, August 2. Oats are very heavy, so much so that at least half are down and have been for two or three weeks, consequently the berry will be injured. Hops run the poles well, and are branched very well, but do not come out of blossom as they ought. I anticipate a very light crop. One silo in our town has been filled with clover, cut up the same as corn. Report says that it is a success.

—— SETH BONFOY, West Winfield, August 4. The weather is of a character to produce potato rot. There is some rust on the tops now.

—— GEORGE W. PINE, Herkimer, August 6. The blight has, within a few days, very much killed the potato vines.

Washington Co., H. H. INGALSBE, Hartford, July 31. The season was dry in the fore part, and some crops suffered, and some seeding of grass was lost, but for six weeks we have had rain so often that there has been a great growth of grass, especially on newly seeded pieces. All crops are from one to two weeks late, but I have never seen every thing look better at this time of year. Weather now very cool, thermometer down to fifty-four degrees this morning.

—— W. H. COOK, Hampton, August 1. The general outlook for crops is good. The season has been one of more than ordinary rainfall. Cows are doing well, but prices of dairy products are low; last dividend at factory seventy-two cents per one hundred pounds of milk. Garden crops are doing well, especially onions and cabbage but the latter much troubled by the worm.

—— J. C. CORNELL, North Argyle, August 1. The oat crop will be large as the acreage is large. Potatoes and corn never looked better.

—— JAMES L. INGALSBE, South Hartford, August 4. A large acreage of potatoes and universally of fine appearance. Very unfavorable weather for the whole of the haying and thus far (one week) for oat harvest. Oat straw rusted. Few apples, a good prospect for fall fruit.

—— JOHN A. ROBINSON, Belcher, August 6. Potatoes, more than the usual acreage planted. Present indications point to a full crop but rust has made its appearance in a few fields. Oats badly rusted.

—— A. G. MEIKLEJOHN, Putnam Station, August 7. Grasshoppers have damaged the oat crop in some localities twenty-five per cent. The potato beetle as numerous as usual. The product of the dairy is ten per cent short in consequence of short pasture.

Saratoga Co., B. S. ROBINSON, Greenfield Centre, July 31. More wheat and rye sowed last fall than usual and the harvest has been very good. Potatoes do not seem to have set very freely.

—— C. E. AMBLER, Saratoga Springs, August 2. The season until about July fifteenth was very favorable for all crops. Since that date the weather has been cool and corn has suffered. The timely rains are very favorable for potatoes.

—— SEYMOUR GILBERT, Saratoga Springs, August 6. Winter grain and grass are very good crops; oats medium; corn looks very well but backward, and the weather is so cold that corn is not maturing as rapidly as usual and there will be danger of frost.

Rensselaer Co., ABEL MERCHANT, Nassau, August 2. There is a good show of corn, the leaves and stalks are thrifty and of a dark color, and if the present month proves favorable we may expect a good crop. The vines of potatoes look thrifty and early potatoes are large. Some apprehensions of rot, if these are not realized the crop must be large.

—— OSCAR J. LEWIS, Schodack Centre, August 2. The crop of potatoes will be large, fully up to the year 1875, when we had the largest crop. They are rotting, a little, at present writing, on low ground. Corn is looking splendid.

—— H. WIER, Johnsonville, August 6. The light snow we had last winter froze so tight to the ground that it nearly ruined winter grain and grass. The dry hot weather in the early part of the season and the dry cold now have injured oats, corn and grass. With the thermometer down below 50° at night it is bad for corn. Oats nearly ruined by rust.

—— CHARLES WING, Lansingburgh, August 6. The spring drought checked the growth of rye, wheat and grass. The abundant rains since have caused a rapid growth, but neither grass nor winter grain has *stooled* as usual, and while the single stalks have headed fairly they are too few in number for a large yield. The quality, however, was never excelled.

Albany Co., H. CALLANAN, South Bethlehem, August 4. The season is two weeks late. Crops have all come forward better than they promised early in the season. Apples are almost a total failure; one-third of a crop of pears, two-thirds of peaches, average of plums, quinces and grapes.

—— R. C. CASE, Guilderland, August 11. Cherries, plums and berries very abundant. Apples scarce; stock looking fine, water in wells scarce, rye, hay and oats generally harvested, farmers' prospects, in general, good.

Greene Co., W. H. VAN ORDEN, Catskill, August 2. The summer has been unusually wet, interfering seriously with the gathering of the crops. Few apples in this neighborhood, but a good show for pears and peaches.

Dutchess Co., NEWTON REED, Amenia Union, August 2. The wheat which survived the winter is good and some whole crops make a fair yield of twenty bushels per acre. Only a small area of wheat is sowed here. There is an unaccountable difference in corn fields. Pastures and newly mowed meadows are very green from the frequent rains.

—— TIMOTHY HERRICK, Staatsburgh, August 3. Have had just enough rain

to keep every thing in the very best growing condition. Pastures are as green and seemingly growing as fast as in May or June.

—— D. B. HAIGHT, Dover Plains, August 4. The hay crop I think not quite as good as last year. A great many old meadows are light, owing, I think, to the ice last winter. New seeded meadows, or those seeded lately, turned a heavy crop. We have had a fine growing season, plenty of rain and hot enough to make a great growth of all crops.

Orange Co., W. D. BARNES, Middle Hope, July 31. The season has been late, weather generally cool and damp. Old meadows were injured by drought last August and did not crop as well as the favorable weather for grass led to expect. Small fruit was generally an excellent crop. Grape rot appeared about a week ago, but few Concord are affected and there are probably ten times as many Concord vines growing as of all other varieties. Many peach orchards show signs of the yellows. The crop will probably be no larger than the one two years ago, though there are perhaps ten per cent more trees in bearing.

—— C. E. HAND, Mountainville, August 1. We have had one of the most growing summers ever known, which has resulted in making hay slightly inferior in quality, as fields which last year were clear timothy have this year a good deal of clover. Small fruits have never been better. A poor prospect for apples; pears and peaches about an average crop. Corn setting finely and a heavy growth of stalk.

—— HENRY E. ALVORD, Mountainville, August 3. A very remarkable season for frequent light rains and showers; surface water to be seen in spots almost every day. Foliage as bright and clean as in May; but one dusty day on the road since May, yet no long storms and few heavy rainfalls.

—— BENJAMIN C. SEARS, Washingtonville, August 3. Our principal product is milk; the frequent rains have kept up the pastures and the supply of milk has been fully up to the demand. The price has been very fair, rather more than the average for the past five years; and the cost of feed about the same. Early fruits and gardens have yielded finely; pears and what few peaches we have promise well. The crop of winter apples will be very short.

—— I. B. HEATON, Monroe, August 6. Onions are a large factor in agriculture in this vicinity; the crop is very good.

—— J. M. MORRISON, Montgomery, August 6. The season is one of general abundance. Pastures have been better than for several years.

—— HORACE MCBRIDE, Middletown, August 6. The prospect for all pasturage is exceedingly encouraging. Oats are being gathered, and the only complaint is of overgrown straw, while the crop is in general above the average. Potatoes are yielding largely. The apple crop is a total failure. Considerable attention is being giving to growing small fruits, especially strawberries, of which the yield has been large and satisfactory. Also to the culture of onions on muck soil, of which there is a large extent bordering on the Walkill river. This crop promises well.

—— D. A. MORRISON, Montgomery, August 8. Corn is very thrifty, the prospect for a good crop is most encouraging. The season has been very favorable for potatoes; there is a large increase in acreage. The yield of clover and timothy on newly seeded lands is much greater than the average of the last few years; old meadows are light. The growing weather, throughout the season, has made abundance of pasture producing a large supply of milk.

Rockland Co., JOSIAH FELTER, Haverstraw, August 1. Crops in general are very good this year, better than last year by fifty per cent.

—— I. B. HUESTED, Blauveltville, August 4. The fruit crop has been unusually good and prices, especially of small fruits, have been well sustained. Much complaint is made of the poor quality of apples, many being very wormy and knotty. Where hogs have been allowed to run in the orchards for years, this is not the case. The season has been a good growing one, with abundance of rain, and crops look fine although ten to twenty days late.

Queens Co., JOHN O'DONNELL, Jamaica, August 1. Insect pests have been very troublesome during the season; more potato bugs are to be seen now than ever

before at this season of the year. Striped bugs and cut-worms have been very numerous. The butterflies that breed the cabbage worm are here in great numbers, and it is feared the cabbage crop will be seriously injured, if not destroyed as it was in 1881. Prices of our produce are low. Last year we were getting about three dollars a barrel for potatoes, this year a dollar and a half. This with the falling off in the yield makes quite a difference. Apples and pears promise a good crop and the small fruits have done well.

—— BENJAMIN D. HICKS, Old Westbury, August 7. We have had an unusually fine season.

—— JOHN A. KING, Great Neck, August 6. The season, notwithstanding its lateness, unusually fine.

Chautauqua Co., H. H. JONES, Jamestown, August 2. Fall feed bids fair to be excellent. There are preparations for a larger acreage of fall wheat than usual. Apple crop short and of poor quality.

—— O. STODDARD, Busti, August 6. It has rained every day, except eleven from May 20 to August 1. Much of the potato sets rotted in the ground and most of those that grew were beginning to rot. Almost all crops on flat land have been too wet to cultivate and most of our winter wheat has to be cut by hand, the ground being too wet to go on with a machine. Apple trees blossomed well, but almost all of the apples have fallen off.

Cattaraugus Co., HALSEY SAFFORD, East Otto, August 3. I have been in Cattaraugus county forty-four years and I do not recollect another so wet a season. Our land is drowned out. Potatoes have rotted and corn on some farms is about a failure. Our hay crop is our dependence; some have more and some have less but all will have a good supply.

—— H. S. HUNTLEY, Little Valley, August 6. Haying has been a good deal retarded by the wet weather and much of the crop will be cut late. The yield will be a full average. The season has been too wet for corn. Crops have been damaged by hail and floods in certain localities.

Allegany Co., D. D. GARDINER, Angelica, August 3. We have had a cold and wet season and almost every kind of vegetation has suffered. The hay crop never was got up in so poor a condition.

—— L. D. UTTER, Friendship, August 4. The season has been very wet. Our hay would be better than last year if it could be got in as good condition. It has also been very wet for potatoes; there is some complaint of their rotting on lowlands. Pastures fine and cows giving a large flow of milk.

—— WILLIAM ORMISTON, Cuba, August 6. The apple crop, which in the spring promised to be so large, is now almost a failure. Oats are very uneven and many pieces are late and liable to rust; on clay soil some have been drowned out. Some winter wheat sprouted before it could be got in. I have seen some pieces of potatoes that looked fine two weeks ago, that have been struck with blight, or rust, and now the tops are all wilted and turned black, and the potatoes are not more than half grown and are beginning to rot. Some of these are on fine dry land. Corn is fully fifteen days later than usual.

—— J. H. RUTHERFORD, Angelica, August 6. So far this has been a season without parallel in the superabundance of water. Hoeing could not be done in season. Haying is, in many cases, just begun. Potatoes are struck with rust and a poor crop.

—— HIRAM DIMICK, Richburgh, August 6. In some parts of the county fall wheat is very good, and the yield will be much larger than I estimated for my immediate vicinity. Wheat has in many cases been injured in harvesting.

Steuben Co., O. F. MARSHAL,* Wheeler, August 6. As to the hay crop, I call it a full crop, also potatoes. I hear of some blight of vines. We have eight or ten acres — I never saw better. Tobacco looks well. We use commercial fertilizers, which improves all our crops. Our wheat is pretty fair for this year. Our oats unusually good.

* There are few older members of the society, either in years or membership, than the venerable Gen. Marshal, who completed his 92nd year on the 14th inst., and writes with unflinching clearness and directness.

——— W. B. PRATT, Prattsburgh, August 2. The apple crop is even less promising than last year — few, knotty and dropping off. Less injury to the trees, so far, from the aphids than a year ago. Cows giving a fine flow of milk. Clover lacking the old-time bloom which precedes a seed yield. A better show of white clover than before in many years. It is the one redeeming feature of our present dismal grass prospect that the abundant white clover of forty years ago seems to be returning to us.

——— JAMES S. MCKAY, Campbell, August 3. Wheat not over one-third of a crop and shrunk. Hay on old meadows very light, on new seeding heavy, but gathered in very poor condition. Barley stained very much, but about an average crop. Oats very heavy. Potatoes the largest crop we ever had if they do not rot, but the blight has begun in some. Corn never looked better here. Tobacco good, but very little set this season on account of the low price paid here for the past two years.

——— W. H. WILLIS, Howard, August 4. Crops will be, on the whole, about an average; winter grain less, and spring grain, perhaps, a little more, with the exception of buckwheat.

——— L. C. KINGSBURY, Corning, August 8. We have had such a wet season, so far, that many crops on wet land are almost worthless. A very large growth of potato vines, but few potatoes in a hill, and the tops dying before the potatoes are ripe. Corn that was hoed looks exceedingly well. On account of the prices offered for last year's crop of tobacco, the acreage this year is much less. Hay on new meadows heavy, but very light on old ones.

——— MARK H. HOPKINS, Prattsburgh, August 9. The season has been exceedingly wet, especially June and July. It has delayed farm work very much. However, it will, I think, prove of untold benefit by giving grass and clover such root as will make them more durable for hay and pasture.

Chemung Co., J. S. HOLBERT, Chemung, August 1. So many years of excessive drought and the open winter, are, so far as I can see, the causes of old meadows being so light. The oat crop now bids fair to be the largest for a great many years. Wheat is shrunk by rust, and it was badly killed out, many fields being ploughed up in the spring and sown with oats. The tops of early potatoes are dying; yield fair; troubled very little with the bugs this season.

——— G. A. GOFF, Jr., Elmira, August 3. It is the general opinion with all who have made close observation that the winter wheat crop in southern New York was never so poor generally as it is the present year, except when severely curtailed in yield by the weevil years ago. Pastures have furnished abundant feed because of the warm wet weather since early spring. Apples are a light crop, the cause being, as I believe, the depredations of the apple aphids. Pears will be plenty. Tobacco is somewhat uneven, but my observations lead me to believe that the crop will average unusually large and will be unusually sound owing to the absence of worms and, thus far of hail.

——— J. S. VAN DUZER, Horseheads, August 6. The hay crop suffered by the cold dry winter and lack of rain until late in May. Fall wheat was badly winter-killed and spring-killed, the same as grass. It was thin, wet weather rusted the straw, so there is a light yield of shrunk and generally poor wheat. Barley is a good average crop, some poor pieces on too moist land, but other excellent pieces on favorable land. There was a large planting of potatoes and the total yield of this county will undoubtedly be much above the average. The acreage of tobacco is much reduced this season on account of the low prices for the two years previous. In this town the falling off is fifty per cent. The crop, as a whole, is looking well, but the weather for the past week has not been favorable. We need light warm rains and less wind. There is a little sprinkling of rain nearly every day, but not enough to do any good.

——— W. A. ARMSTRONG, Elmira, August 6. From June 26 to July 28, there was a succession of rain that made haying very difficult. In the month there were not three consecutive days without rain. The stimulus to oats was wonderful, the crop is probably larger than in any year of the past twelve or fifteen, but harvest will be late. Potatoes too have felt the rains just at the right time. Wheat disappoints; quality poor and yield very light.

Tioga Co., C. J. ROBINSON, Richford, August 2. Apple crop pretty nearly a failure, other fruits nearly an average. Unusually frequent rains and excess of moisture, yet the cultivated crops have not greatly suffered. On the whole the outlook is as favorable as last season.

—— J. S. STANCLIFF, Spencer, August 4. The winter wheat was badly hurt by the extreme dry weather in April and May, therefore not over two-thirds of a crop. Other crops, average.

—— CHARLES H. MILLER, Smithborough, August 6. It being so extremely wet but little buckwheat was sown, perhaps not more than half the acreage of a full year. What is sown looks very fine.

—— O. L. RANDALL, Newark Valley, August 6. Owing to the scarcity of labor, farmers are depending more upon machinery and turning their attention to crops that can be secured by horse power. There is also a shortening up of the dairy production and consequently phosphates and commercial fertilizers are taking the place of barnyard manure. All our calves are leaving the country.

—— GEORGE WOODFORD, West Candor, August 6. Corn, oats, buckwheat and potatoes are all looking first-rate.

—— LOUIS P. LEGG, Jenksville, August 10. The season has been a very peculiar one; wet, and that continually, from the middle of June to August 5. The hoed crops have been greatly neglected and the weeds have obtained the mastery. When we did cultivate and hoe the ground was so wet and heavy that in drying it baked and cracked. The prospects of the farmer are not very encouraging, grass crop short, wheat crop short, the potato crop short even if they do not rot, and Congress fooling with the revenue so as to hurt the wool market and so to make the sheep and lamb market precarious. The grass in the pastures has been much better than in the meadows, which has made the dairy produce quite an average, and the prospect for a grass crop another year is quite encouraging, the meadows where the hay has been taken off looking very green.

Broome Co., M. D. BRANDAY, Whitney's Point, August 1. The hay crop is lighter than it has been for years, owing to the drought last year which killed the roots of clover and timothy. Cows are giving a good yield of milk.

—— ROBERT HOGG, West Chenango, August 4. There is the lightest crop of hay I have ever seen, one-third yet to cut. Lightning has struck more than ever known before and wind has done much damage.

—— E. G. CRAFTS, M. D., Binghamton, August 7. Drought in May injured the hay crop, for quantity. June and July too cold and wet for corn. Possibly the corn crop may yet come on.

Delaware Co., A. S. GIBBS, Harpersfield, August 6. Nearly all crops look well. Oats are so heavy we fear they may lodge too much to fill well. Apples will be a lighter crop than for several years.

Sullivan Co., J. E. WINTER, Winterton, August 2. Oats seemed well filled with large growth of straw but will not weigh as much as in some seasons. The acreage of potatoes is unusually large and prospect good for a large crop. The outlook for the corn crop is better than last season.

—— JAMES D. DECKER, Pond Eddy, August 2. The season is backward, last year's seeding of grass is very fine, old meadows not in as good condition as last year. Too wet for low bottoms, upland good; therefore, an average crop of grass and cereals.

—— WILLIAM HAWKS, Narrowsburgh, August 2. The news from some parts of the county not very good, the season has been too wet and cold for corn, but along the Delaware valley it never was better.

—— R. C. YOUNG, Liberty, August 3. In our county, in the vicinity of the N. Y., Ontario & Western R. R., special attention is given to the production of milk and butter, principally to the shipment of milk. We raise green forage of all kinds for cows in order to get the largest returns. Some of our farmers are putting in silos, and we buy more grain than we sell.

—— JAMES C. GEDNEY, Pike Pond, August 6. Crops generally look fine, have

had plenty of rain. So far the season has been a very growing one, could not wish any better.

——— P. R. PELTON, Monticello, August 6. A very growing season — pastures have been fine; hay not up to average on account of drought last fall; all other crops good except apples, which are a complete failure.

Lewis Co., E. CROFOOT, Turin, August 9. The apple crop is almost a total failure. Feed has been abundant and the yield of milk more than an average in quantity.

——— B. B. MILLER, Lowville, August 14. The hay crop is the best in quantity for years, but the quality is below average for shipping, for home use it is very good. On light and sandy soils potatoes have made a wonderful growth, and the yield will be the best for years; too much rain for heavy soils. The acreage is large. Cheese and butter ten per cent greater make, to date, than for several years. Hops promise a good yield, but muggy weather would damage greatly. Lice and mould show a little. All grain is filling well. Oats will be very heavy. Corn is very backward, an early frost will make that crop a failure.

Jefferson Co., C. C. INGRAHAM, Carthage, July 31. Oats and potatoes are good. It has been very wet all summer. Hay has a large growth, but will not go so far to feed stock as it would had it been dry, and there is little good market hay.

——— W. H. GRENELL, Pierreport Manor, August 1. Bean and pea crop for seed purposes, about one-half a crop, and acreage not so large as last year.

——— D. A. RICH, Bishop Street, August 2. Rust is damaging peas and beans.

——— C. B. BUCKMINSTER, St. Lawrence, August 3. Peas this year are a poor crop.

——— WM. A. IRWIN, Stone Mills, August 3. An unusual amount of rainy weather though July has retarded haying and injured a considerable amount of hay. Rust has injured winter and some varieties of spring wheat. Potato beetles thicker than last year. An unusual quantity of white clover in meadows. Old meadows light. Clover a very heavy crop.

——— H. T. HOPKINS, Cape Vincent, August 6. A large amount of peas grown here, about one-half to two-thirds of a crop.

——— J. M. WILCOX, Three-Mile-Bay, August 6. Our garden seed pea crop is partly a failure, not more than two-thirds of a crop. There were large quantities sown last spring. Beans, of which many acres were planted for seed, are looking very fine. For the past three or four years, alsike clover has been sown more or less and has grown steadily in favor.

——— WALTER ZIMMERMAN, Brownville, August 13. Northern Jefferson county never looked as well at this time of the year as at present. Pasturage is exceedingly good. Cows giving large yields of milk and in good flesh.

St. Lawrence Co., G. M. GLEASON, Gouverneur, August 1. There is a large growth of grass, but of poor quality, many more weeds than usual. The weather has been too wet and cold for any thing but grass to grow. Wheat, oats and corn are looking badly.

——— C. A. WOOSTER, Hammond, August 1. The hay crop is very heavy and of fine quality only that the constant rainy weather damaged very much of it. Clover fields will turn out a heavy second crop, while pastures are able to keep almost double the amount of stock laid out for them. Fall wheat is generally good, as favorable fields are always selected for it, but many fields of spring grain are badly damaged by wet. As a general thing corn will be very poor. Potatoes good on dry ground, on low wet fields, looking badly.

——— L. CRAMPTON, Pierrepont, August 2. The quality of grass was good before cutting but somewhat injured after cutting. I never knew pasture so good at this time of year. Crops of all kinds, as far as my observation extends, are good except on lowlands and some places where the water stood.

——— N. M. CURTIS, Ogdensburgh, August 3. The farmers patronizing cheese factories are receiving satisfactory returns, but those sending to butter factories or manufacturing butter at home, complain of prices offered, and many are hold-

ing their products. With good weather there will be a large crop of barley, oats and potatoes, and fair, if not good, corn.

——— C. T. HULBURD, Brasher Falls, August 3. Season very wet, in ten years have not had such a showery summer. Results, uplands and light soils, splendid growth; lowlands badly injuring all grasses, and sowed and planted crops, but, hereabouts, the grass crop is a great growth, notwithstanding.

——— H. C. MAINE, Hermon, August 6. We have a very large growth of hay but so much rain that we cannot gather it in good condition. A good many pieces are so wet that they will not be cut at all. Taking every thing into consideration I think the hay crop is not worth as much as it was last year. Where the ground is high enough, so that the grain is not drowned out, it has such a large growth that it is lodged and not filled. It has been so cold and wet that corn will not be more than half a crop. Potatoes bid fair to be a large crop, but if the weather does not change soon there will probably be many rotten ones.

Franklin Co., M. W. HUTCHINS, Malone, August 3. Light land is doing nicely as to all kinds of crops; clay soils are very wet.

——— S. A. BEMAN, Malone, August 6. Insects have not attacked wheat, corn or hops. Potatoes are doing well and the yield of all kinds of cereals promises to be equal to the greatest the county has ever produced.

Clinton Co., H. S. RANSOM, Plattsburgh, August 2. Clover was generally killed during the winter but we have had so much rain that other grasses have made its place good. Corn was planted very late and it has been too cold and wet for it. Potatoes show white specks on the skin, which are looked upon as a sign of rot, possibly dry weather may save them. A fair crop of plums, small one of apples and pears.

Essex Co., WALTER MERRILL, Port Henry, August 1. The prospect for abundant crops of all kinds was never better than now. Fruit of all kinds is plenty except apples which are a total failure.

——— W. E. CALKINS, Ticonderoga, August 6. Promise of bountiful crops. Quantity of hay large, as a whole the quality not quite as good as last year, some of it not put up in quite as good condition. Apples are a comparative failure, not over half a crop, if that. Pears, grapes and small fruits promise well.

Warren Co., NELSON HULL, Glen's Falls, August 3. We have had a very favorable season for crops; frequent rains, more than for several years, and plenty of sunshine.

——— JAMES S. COOLEY, M. D., Luzerne, August 2. The soil in this vicinity on both sides of the Hudson, in Saratoga and Warren counties is not well adapted for farming, being sandy and in many places stony. Only by the use of manures and fertilizers can fair crops be obtained. The business here is lumbering and taking summer boarders. We do not produce a quarter of the grain or one-half of the hay needed for home consumption. Market gardening is carried on to some extent to furnish the hotels. The manufacture of wood pulp is the leading manufacturing enterprise of this region.

BULLETIN NO. 9. — NOVEMBER, 1883.

NEW YORK STATE AGRICULTURAL SOCIETY, }
ALBANY, *November 20, 1883.* }

On October 26, a circular was issued requesting answers to the questions printed at the head of the two tables following. For the first table 335 replies were available, for the second 345. Thanks are tendered to the correspondents who have contributed the information now presented.

The crop of corn is so much less than usual, in almost all the counties, that under question 1, the figures in the columns headed "less" and "much less" stand relatively for more extreme reductions than in the same columns of former bulletins. Under the head of *less* have been counted reductions of from one-quarter to one-half and under the head of *much less* reports of from one-half reduction to total failure. When a less reduction than one-quarter was stated it was counted as *equal*. It is doubtful whether, even with this explanation, the figures fully represent the extent of the misfortune, for, in many cases, correspondents have considered quantity only, and not the large proportion of unsound corn, and the reduced value of the stover has not been taken into consideration. The tabulated reports in relation to the clover-seed crop refer only to the crop of *small*, or *medium*, red clover-seed. The less important *large* red-clover and Alsike are quite generally reported to have given fair crops of seed and appear to have escaped injury by either the *clover-seed midge*, quite generally mis-called the *weevil*, or the *clover root-borer*, which is frequently referred to as the *grub*.

REPLIES TO CIRCULAR NO. 3. — AUTUMN OF 1883.

[illegible]

Replies to Circular No. 3, Autumn of 1883—(Continued).

No of replies received.	Counties.	Question 3, c. What varieties of wheat have been sown this autumn, naming them in the order of popularity?	Question 2, c. What varieties of potatoes constitute the main crop this year, naming them in the order of popularity?	Question 2, d. What varieties of potatoes have succeeded best this year?
15	Erie....	Clawson, Fultz, Mediterranean, Treadwell, Russian Red, Blue-stem, Mediterranean Hybrid.	Burbank's, Late Rose, Early Rose, Beauty of Hebron, White Elephant, Early Ohio, Peerless, Snowflake, Dunmore.	Burbank's, Early Rose.
4	Niagara.....	Clawson, Mediterranean, Fultz, Gold Medal.	Early Rose, Late Rose, Beauty of Hebron, White Star, Burbank's, Mammoth Pearl, St. Patrick.	Early Rose, Late Rose, White Star.
5	Orleans	Clawson, Russian Red, Mediterranean, Old Red.	Burbank's, Late Rose, Beauty of Hebron, Snowflake, Peerless, Peachblow, White Elephant, Early Rose.	Burbank's, Late Rose, Beauty of Hebron.
2	Genesee ..	Clawson.	Burbank's, Late Rose, Peerless, Early Rose.	Burbank's.
8	Monroe... ..	Clawson, Russian Red, Fultz, Mediterranean, Egyptian Red, Long Red.	Burbank's, White Elephant, Late Rose, Early Rose, Snowflake, Irish Favourite, Beauty of Hebron, Peerless.	Burbank's, White Elephant, Irish Favourite, Late Rose.
9	Livingston....	Clawson, Fultz, Long Red, Wicks.	Late Rose, Burbank's, Peerless, Early Rose, James Vick, Beauty of Hebron, Snowflake.	Burbank's, Late Rose, James Vick, White Elephant, St. Patrick.
13	Wyoming ...	Clawson, Treadwell, Russian Red, Amber.	Burbank's, Late Rose, Early Rose, Snowflake, White Elephant, Beauty of Hebron.	Burbank's, Late Rose, Snowflake.
2	Wayne.	Clawson, Red Lancaster (white).	Burbank's, Beauty of Hebron, Early Rose, Late Rose, Snowflake.	Burbank's.
17	Ontario.....	Clawson, Blue-stem, Fultz, Lancaster (red), Russian Red, Long Red, Kentucky White, Short Red, Egyptian Red, Post.	Burbank's, Beauty of Hebron, Peerless, White Star, Mammoth Pearl, Late Rose, White Elephant, James Vick, Belle.	Burbank's, Beauty of Hebron, Mammoth Pearl, Snowflake, White Star, Peerless, Clark's No. 1.
4	Yates.....	Clawson, Acme, Fultz, Mediterranean, Russian Red.	Burbank's, Beauty of Hebron, Dunmore, Mammoth Pearl, Snowflake, Peerless, Early Rose, Late Rose, White Elephant, White Star.	Burbank's, Mammoth Pearl, Dunmore.
6	Seneca.....	Clawson, Lancaster, Egyptian White, Fultz, Mediterranean, Landreth.	Burbank's, Early Rose, Beauty of Hebron, Late Rose, White Elephant, Snowflake, St. Patrick.	Burbank's, Beauty of Hebron.
7	Cayuga	Clawson, Fultz, Lancaster.	Burbank's, Mammoth Pearl, Early Vermont, Beauty of Hebron, Early Rose, St. Patrick, Clark's No. 1, Late Rose, Early Ohio, Chicago Market, White Elephant.	Burbank's, Beauty of Hebron, Mammoth Pearl, White Elephant.
16	Tompkins	Fultz, Clawson, Lancaster, Treadwell, Russian White.	Burbank's, Late Rose, White Elephant, Albany Seedling, Early Rose, Mammoth Pearl, Queen of the Valley, Snowflake, Blue Victor, Beauty of Hebron.	Burbank's, Blue Victor, Albany Seedling, Beauty of Hebron, Late Rose, Snowflake.
2	Schuyler... ..	Clawson, Fultz, Treadwell.	Burbank's, Albany Seedling, Chili, Rose, Beauty of Hebron.	Chili, Burbank's.

Replies to Circular No. 3, Autumn of 1883—(Continued).

No. of replies received.	Counties.	Question 3, c.	Question 2, c.	Question 2, d.
		What varieties of wheat have been sown this autumn, naming them in the order of popularity?	What varieties of potatoes constitute the main crop this year, naming them in the order of popularity?	What varieties of potatoes have succeeded best this year?
7	Onondaga...	Clawson, Acme, Fultz, Blue-stem, Lancaster.	Burbank's, Beauty of Hebron, Early Rose, Late Rose, Peerless, Early Ohio, White Elephant, Blue Victor.	Burbank's, Beauty of Hebron, Late Rose, Peerless.
9	Oswego	Clawson, Log Cabin, Blue-stem, Italian, Treadwell.	Burbank's, Late Rose, Early Rose, Beauty of Hebron, Scotch Seedlings, Snowflake, St. Patrick.	Burbank's, Late Rose, Beauty of Hebron.
5	Cortland	Clawson, Acme, Blue-stem, Diehl.	Burbank's, Late Rose, Beauty of Hebron, White Elephant, Snowflake, Pride of the Valley, Early Rose.	Burbank's, Beauty of Hebron.
1	Chenango ...	Clawson.....	Rose, Beauty of Hebron, Burbank's.	Burbank's will be planted next year.
9	Madison...	Clawson, Treadwell, Acme, Fultz, Diehl, Mediterranean.	Burbank's, Late Rose, Early Rose, Mammoth Pearl, Beauty of Hebron, Snowflake, Chili, St. Patrick, Peachblow, White Elephant.	Burbank's, Late Rose, Beauty of Hebron, Mammoth Pearl, Scotch Champion, Chili.
8	Oneida	Clawson, Treadwell, Jarvis, Mediterranean.	Burbank's, Late Rose, Beauty of Hebron, Peerless, White Elephant, Snowflake, Mammoth Pearl, Pride of America, Late Vermont, White Star.	Burbank's, Beauty of Hebron, Peerless, White Star, Mammoth Pearl, Early Mayflower.
1	Fulton .....	.....	Early Rose, Late Rose, Conqueror, Sunrise, Beauty of Hebron, Clark's No. 1, Burbank's.	Conqueror, Sunrise, Beauty of Hebron, Clark's No. 1, Burbank's.
6	Montgomery.	Clawson, Mediterranean, Wicks, Log Cabin, Lancaster Red, Gold Medal.	Early Rose, Early Vermont, Beauty of Hebron, Snowflake, Peerless, White Elephant, Blue Mercer, Burbank's, Early Ohio.	Early Rose, Snowflake, Beauty of Hebron, Peerless, Burbank's.
9	Otsego	Clawson, Fultz, White Flint, Treadwell.	Burbank's, Early Rose, Beauty of Hebron, Snowflake, Late Rose, Chili, St. Patrick, Magnum Bonum, Early Vermont, Queen of the Valley, White Elephant.	Burbank's, Pink-eyed Rustycoat, Early Rose, Beauty of Hebron, Queen of the Valley.
9	Schoharie ...	Clawson, Log Cabin, Fultz, Wicks, White Flint, Amber, Egyptian.	Early Rose, Beauty of Hebron, Burbank's, Peerless, Snowflake, Mammoth Pearl, Late Rose, White Elephant, Peachblow.	Burbank's, Beauty of Hebron, Early Rose, Peerless, White Elephant.
15	Herkimer	Clawson, Mediterranean, Log Cabin, Amber.	Early Rose, Burbank's, Late Rose, Snowflake, White Elephant, Peerless, Rose Seedlings, Early Vermont, Beauty of Hebron, Dunmore, Whipple Seedling, White Star, Clark's No. 1, Late Vermont.	Burbank's, Late Rose, Early Rose, White Elephant, Snowflake.
8	Washington .	Clawson, Fultz, White.	Burbank's, Peerless, Beauty of Hebron, No. 6, White Star, Late Rose, Early Rose, White Elephant.	Burbank's, Peerless, Beauty of Hebron, Late Beauty of Hebron, White Star, White Elephant, No. 6.

Replies to Circular No. 3, Autumn of 1883—(Continued).

No. of replies received.	Counties.	Question 3, c. What varieties of wheat have been sown this autumn, naming them in the order of popularity?	Question 2, c. What varieties of potatoes constitute the main crop this year, naming them in the order of popularity?	Question 2, d. What varieties of potatoes have succeeded best this year?
2	Saratoga	Clawson, Rogers, Diehl.	Burbank's, Beauty of Hebron, Early Rose, Late Rose.	Burbank's, Beauty of Hebron, Early Rose.
1	Schenectady.	Clawson, Fultz.....	Early Rose, Snowflake, Burbank's, Chili Pink.	Chili Pink.
5	Rensselaer..	Clawson.	Burbank's, White Rose, Peerless, Beauty of Hebron, Snowflake, Early Rose, Late Beauty of Hebron, Peachblow, White Elephant, Early Rose.	Burbank's, White Rose, Peerless, Late Beauty of Hebron.
4	Albany	Clawson, Log Cabin.....	Beauty of Hebron, Burbank's, Early Rose, St. Patrick, Late Rose, Peerless, Early Ohio, Snowflake, Early Vermont, Carpenter's Seedling.	Burbank's, Beauty of Hebron, St. Patrick, Early Vermont, Early Ohio, Peerless.
2	Columbia ....	.....	Early Rose, Burbank's Late Rose, Snowflake.	Burbank's, Early Rose, Late Rose.
2	Greene ...	Clawson, Mediterranean.	Burbank's, Early Rose, Late Rose, Mammoth Pearl, Beauty of Hebron, Garnet Chili, Snowflake, Black Mercer.	Burbank's, Early Rose, Mammoth Pearl, Garnet Chili, Mercer, Late Rose.
5	Dutchess	Treadwell, Clawson, Red.	Early Rose, Beauty of Hebron, Burbank's, Late Rose, White Elephant, Belle.	Beauty of Hebron, Early Rose, White Elephant.
1	Putnam ...	.....	Beauty of Hebron, Late Rose.	Beauty of Hebron.
18	Orange.....	Treadwell, Clawson, Fultz, Mediterranean, Amber, Blue-stem, Mediterranean Hybrid, Egyptian White, Golden Drop, Gold Medal.	Early Rose, Beauty of Hebron, Burbank's, Late Rose, Mammoth Pearl, White Elephant, Snowflake, Pride of the Valley, Carpenter's Seedling, Clark's No. 1, Peerless, Morris White, Ice Cream, Early Vermont, Electric, Queen of the Valley.	Beauty of Hebron, Early Rose, Burbank's, Mammoth Pearl, White Elephant, Pride of the Valley, Electric, Snowflake, Queen of the Valley.
3	Rockland	Clawson, White Flint, Mediterranean.	Late Rose, Early Ohio, Beauty of Hebron, Snowflake, White Star, White Elephant, St. Patrick, Mammoth Pearl, Queen of the Valley.	Late Rose, Early Ohio, Mammoth Pearl, White Star, Beauty of Hebron.
4	Queens	Clawson, Mediterranean, Blue-stem, Fultz	Early Rose, Beauty of Hebron, Burbank's, Queen of the Valley, White Elephant.	Early Rose, Queen of the Valley, Beauty of Hebron, Burbank's.
2	Suffolk	Clawson	Early Rose, Beauty of Hebron, White Elephant, White Star, St. Patrick, Queen of the Valley.	Beauty of Hebron, White Elephant, White Star.
3	Chautauqua .	Clawson, Wicks, Bentley.	Beauty of Hebron, Early Rose, Snowflake, Burbank's, Late Rose, Early Ohio, White Elephant.	Beauty of Hebron, Snowflake, Burbank's, Late Rose.
3	Cattaraugus .	Clawson.....	Burbank's, Late Rose, Early Rose, Magnum Bonum.	Burbank's, Snowflake.

Replies to Circular No. 3, Autumn of 1883—(Continued).

No. of replies received.	Counties.	Question 3, c.	Question 2, c.	Question 2, d.
		What varieties of wheat have been sown this autumn, naming them in the order of popularity?	What varieties of potatoes constitute the main crop this year, naming them in the order of popularity?	What varieties of potatoes have succeeded best this year?
8	Allegany....	Clawson, Wicks, Russian Red, White Michigan.	Burbank's, Late Rose, Beauty of Hebron, Early Rose, Mammoth Pearl, Peachblow, Chili, Dunmore, White Rose, Queen of the Valley, Snowflake, Early Vermont, Early Ohio.	Burbank's, Late Rose, Chili, Early Rose, Peachblow, Queen of the Valley, White Rose.
7	Steuben....	Clawson, Fultz, Soule's, Gold Medal.	Burbank's, White Elephant, Beauty of Hebron, Early Vermont, Chili, Late Rose, Early Rose, Queen of the Valley, Early Ohio, White Star, Mammoth Pearl, Chicago Market, American Giant, Peachblow.	Beauty of Hebron, Burbank's, White Elephant, White Star, Mammoth Pearl, Late Rose, Chili, English Russet.
8	Chemung..	Clawson, Fultz, Blue-stem, Treadwell, Mediterranean, Heige's.	Early Rose, Burbank's, Queen of the Valley, Late Rose, Snowflake, Beauty of Hebron, Early Ohio, White Rose, Albany Seedling.	Burbank's, Queen of the Valley, Early Rose, Late Rose, Snowflake, Beauty of Hebron, Early Ohio, Albany Seedling.
11	Tioga....	Fultz, Clawson, White Mediterranean, Wicks, Hurlburt.	Burbank's, Queen of the Valley, Late Rose, Early Rose, Belle, Early Vermont, White Elephant, Mammoth Pearl, Snowflake, Beauty of Hebron, Chicago Market, Peerless, Blue Victor.	Burbank's, Queen of the Valley, Belle, Early Vermont, White Elephant.
5	Broome.....	Clawson, Wicks, Mediterranean.	Burbank's, Late Rose, Rose Seedlings, Queen of the Valley, Mammoth Pearl, Bulkley's, Early Rose, Chicago, Market, Beauty of Hebron.	Burbank's, Late Rose.
2	Delaware..	Clawson, Club	Beauty of Hebron, Peerless, Early Rose, Burbank's, Late Rose.	Beauty of Hebron, Peerless.
8	Sullivan..	Treadwell, Bald-head, White Flint, Mediterranean, Lovett's New White, Martin.	Early Rose, Late Rose, Burbank's, Snowflake, White Star, Magnum Bonum.	Burbank's, Late Rose, Early Rose, Mammoth Pearl, Queen of the Valley.
2	Lewis .....	.....	Burbank's, Late Rose, Early Rose, Beauty of Hebron, Red Chili, Snowflake.	Burbank's, Late Rose.
12	Jefferson ..	Clawson, Fultz, Lancaster, Red Michigan, White Michigan, Amber.	Beauty of Hebron, Late Rose, Early Rose, St. Patrick, Burbank's, Hawkeye, Early Vermont, White Star, Clark's No 1, Mammoth Pearl, Snowflake, Chicago Market, Peerless, White Peachblow.	Beauty of Hebron, St. Patrick, Burbank's, Hawkeye, Late Rose, Chicago Market, White Star, Early Vermont, Clark's No. 1.
16	St. Lawrence.	Clawson, White Winter, Canada White, Amber.	Early Rose, Late Rose, Burbank's, Beauty of Hebron, Early Vermont, Snowflake, Early Ohio, White Star, No. 2, Fluke, St. Patrick, White Elephant, Late Vermont, Prolific, Mammoth Pearl, Peerless, Rose Seedling.	Beauty of Hebron, Late Rose, Early Rose, Burbank's, Snowflake, St. Patrick, Early Ohio, Early Vermont, James Vick, White Elephant, Prolific, No. 2.

Replies to Circular No. 3, Autumn of 1883—(Continued).

No. of replies received.	Counties.	Question 3, c. What varieties of wheat have been sown this autumn, naming them in the order of popularity?	Question 2, c. What varieties of potatoes constitute the main crop this year, naming them in the order of popularity?	Question 2, d. What varieties of potatoes have succeeded best this year?
1	Franklin ...	.....	Rose, Snowflake, No. 2.	No. 2.
1	Clinton.....	.....	Early Rose, Snowflake, No. 2.	Early Rose.
6	Essex....	..	Early Rose, Late Rose, Peerless, Snowflake, White Peachblow, Burbank's, No. 2.	Early Rose, Late Rose, White Peachblow, Peerless, No. 2.
6	Warren..	.....	Early Rose, Late Rose, Burbank's, Beauty of Hebron, Snowflake, White Peachblow, Early Ohio, No. 2, No. 6, Early Vermont, Peerless.	Early Rose, Late Rose, Burbank's, White Peachblow, Beauty of Hebron.

EXTRACTS FROM CORRESPONDENCE.

Erie Co., C. N. BRAYTON, South Wales, October 31. On the whole, the season just closing has been a fair one for farmers in this vicinity. Butter has been low, but cheese, which is the main product here, has brought a fair price. We have more apples than was generally supposed before picking. Oats yielded very heavily, hay an average crop, corn and wheat light, potatoes and barley good. Stock enters the winter in rather better than average condition. The raising of fine stock, horses and cattle, is growing rapidly in this county, owing in a great measure to wealthy gentlemen of Buffalo investing in farms and stocking with the best that they can procure, and the liberality with which they allow farmers to use their stock.

——— L. G. KELSEY, Marilla, November 5. Owing to so much rain and cold weather, which hindered getting in crops, and to the very hard frost of September 10, there will be hardly any beans, buckwheat or corn. Many farmers having ten to fifteen acres of beans have lost the whole. So with all late sweet corn. Oats have turned out rather a light crop to what it was thought they would yield.

Niagara Co., JOHN V. HESS, Hess Road, November 5. This has been a very poor year for farmers. The spring was cold and backward and very wet until the first of July. We had no corn weather here, and a very early frost which cut the corn off just in the milk; some of it had not got as far along as that. Nearly all the beans were frozen to death. Clover seed got a large growth, but the midge destroyed about all of it.

——— C. D. ROBISON, Lockport, October 31. When I made out the last report I averaged the wheat crop at five bushels per acre, but on threshing it went about two and a half, and rather poor at that. Potatoes and oats are the only crops that we can call fair.

Orleans Co., JAMES H. PERRY, Ridgeway, November 3. The apple crop is much larger than was expected, prices ranging from two to three dollars per barrel. The peach crop in the western part of Orleans county has seldom been better than this year, and brought good prices. Beans, corn and late potatoes badly damaged by frost.

——— U. C. ROGERS, Albion November 3. There is no clover seed worth mentioning in this section. The reason—the weevil in the head (midge) and the early frosts. The root seems to have done better this year than for several years, and most of the clover has been cut for hay the second time, giving a large yield.

Genesee Co., E. TOWNSEND, Pavilion Centre, October 30. The apple crop is very poor; and the early frost did great damage, corn and late beans suffering most. Stock has done quite well this season. We have had an abundance of grass.

——— N. BOGUE, Batavia, October 31. The apple crop is much larger than was expected. Many orchards are yielding fair crops of good, smooth fruit. Nearly all other fruits were scarce excepting plums.

Monroe Co., WILLIAM NEWTON, Henrietta, November 2. The corn crop is the poorest ever raised here within my recollection. On account of the rains in the spring most of it was planted late, and the soil being saturated with water it was not properly cultivated, and the season continuing cold and wet the crop is almost an entire failure, many fields containing scarcely a sound ear. The season has been favorable for potatoes, and the crop is much above the average, while the tubers are of enormous size, some so large that buyers object to them. There is more complaint of rot than usual. Many new varieties were planted last spring, and most of them have proved very satisfactory as to productiveness.

——— J. H. BREEZE, Parma, November 1. Our corn crop is a total failure, hardly any hard enough to crib. Clover seed is also a failure in this county.

——— ANDREW J. GALLUP, Clarkson, November 5. Wheat, beans, corn and the apple crop have been very light. Barley just a fair crop. Oats good. Potatoes better than last year, but not a full crop. Hay very good. Pastures have been excellent all the season. New seedings of grass and clover are fine. There will be no red clover seed in this vicinity. Alsike clover will yield very well for the amount grown for seed.

Livingston Co., WILLIAM HAMILTON, Caledonia, November 2. Wheat is the main crop of this section. The loss of last crop caused many fields to be stubbled in. White beans are the saving of the credit of many of our farmers on the dry lands, while on cold, wet land they were all frozen. The price is high, and the yield, where they ripened before the frost, good. Weather very favorable for the growing wheat and for fall feed. The amount of winter forage in the shape of hay is larger than for years. No small clover seed; all killed by the clover grub eating the plant. Some large clover has been cut for seed, but not yet threshed.

——— W. J. ERWIN, Webster's Crossing, November 2. The very severe frosts of September 10, and later, destroyed a very large proportion of all the corn in this part of the country. I do not know of a single field that is "sound," as we commonly express it. Much will not be husked, and much remains uncut. Wheat has a small top, but is of fine color and very even. Large clover seed good; small or medium, none.

——— SAMUEL CULBERTSON, East Groveland, November 1. A poor crop, or none at all, of medium red clover seed. Alsike is the only clover that has seeded the present year. The medium was killed by both grub and midge — scarcely a field cut for seed.

Wyoming Co., BUCKLEY HOWES, Bliss, November 2. Our hay crop is good, our grain crop is good. The potato crop is poor, mostly on account of rot.

——— GEORGE H. DUNHAM, Johnsonburgh, November 2. It is many years since the patience and judgment of farmers were so much tried, especially on the wet, cold lands of this region, never, this year, dry enough to cultivate in the season of cultivation. The dairy interest has suffered terribly.

Wayne Co., GEORGE W. MARSHALL, Palmyra, November 1. Early frost prevented corn maturing, consequently there will be a large percentage of poor, almost worthless, corn. Potatoes have yielded quite well, but as there is more or less rot the quantity will be reduced at least ten per cent. Clover seed has again failed with us; it made a good growth, but failed to make seed, and in most instances it was cut and cured for hay, yielding almost as well as at the first cutting.

Ontario Co., J. S. DORMAN, Billsborough, October 31. Our summer has been remarkable for cold and wet. Corn on under-drained land is of fair growth and

well eared, but a large proportion has failed to ripen, though some fields are fairly good. Frost came about two weeks too early. Of potatoes, I think at least one-third were lost by rot. Medium clover seed is almost a total failure; the large promises a good crop.

——— CHARLES COOLIDGE, Phelps, October 31. Wheat was sown in good season and looks finely, especially that which has been phosphated. The weather has been just cool and wet enough to make good growth. Rye the same; only a small amount sown, chiefly for spring feed. Corn seems to turn out better than was expected, especially on good ground or where phosphates or other manures were used. Potatoes are better than expected, although on low and wet land there is some complaint of rot. Apples also more plenty, but inferior in quality. The season has been without sunshine and seemingly without a summer.

——— C. P. WHITNEY, Orleans, November 7. Corn on low land is an almost entire failure, except where it had perfect drainage, and even there it was injured by the early frost. Early-planted corn on ridge land is very good. Some varieties of potatoes are rotting badly. Those on low land are most affected. Wheat looks very promising.

——— J. WARNER CLARK, Naples, November 10. The staple product of this town is fruit. We have nearly one thousand acres of grapes and peaches in our valley and on the hillsides. The early frost this season destroyed one-third of our grape crop and much late-planted corn.

Yates Co., N. H. GREEN, Rushville, November 2. The spring was very wet and backward. All spring crops were put in very late, and the season has been generally wet, causing a large growth of straw, stalks, vines and hay. Winter wheat looked badly in the spring, but after a time it came on, and when harvested was better than hoped for—about two-thirds of a crop generally, some crops much less. Barley is a very satisfactory crop generally, and an average sample, some very fine.

——— JAMES MILLER, Penn Yan, November 3. The season has been remarkable for low temperature and extreme wet from the latter part of May to the 10th of July, which greatly retarded planting and prevented cultivating. The result was that but a small part of the corn had matured before the hard frost of October 15. Barley, oats and potatoes were fair crops. Hay and pasture were good on new-seeded land, poor on old meadows and pastures. Apples were nearly a failure; strawberries, injured by the winter and excessive wet, a light crop; other small fruits good. Pears were a fair crop. Grapes were badly injured by the winter and the wet weather of June and July, and few of what remained were ripe before the hard frost.

Seneca Co., WILLIAM BRICKLEY, Fayette, November 10. The corn crop, the first of the season, did very well until the wet weather set in, which with cool weather, stopped its growth so that it did not ripen, even where not injured by frost.

——— M. B. RITTER, Waterloo, November 5. We have had a peculiar season, hardly two days alike. It has been cold and wet. Early frost ruined the corn crop. Some large fields will not pay for husking, and some farmers say they will not husk theirs at all. Wheat, the poorest I ever saw in this county. Apple crop a failure. Pastures are getting short by reason of heavy frosts. Stock is looking well. Barley and oats good.

——— C. J. HAMPTON, Junius, November 4. A few fields of large clover have been cut for seed, also some Alsike, which will give a moderate yield. Although the second crop of the small variety was a luxuriant growth, I do not know of any being saved for seed.

Cayuga Co., JOHN J. THOMAS, Union Springs, October 31. On my own grounds I have found great advantage to the corn crop from subsoiling. This was done to prevent the effects of drought, should it occur; but the season being very wet, it prevented the bad effects of flooding, so injurious to many crops. The corn on subsoiled ground ripened well and was probably 15 to 20 per cent more in quantity.

——— JOHN R. PAGE, Sennet, October 30. Owing to the frequent rains, grass, pasture and hay was very abundant. Crops but moderate, great growth of straw.

My own wheat (14 acres) turned fifteen bushels per acre, oats thirty, barley thirty-two.

——— HOWARD TYRON, Fleming, October 31. Potatoes have rotted very much and are still rotting. Barley did not turn out as well as expected; two-rowed about thirty bushels per acre. Mensury, a six-rowed variety sent out by the U. S. Agricultural Department two or three years ago, yields from fifty to seventy-five bushels.

Tompkins Co., P. B. CRANDALL, Ithaca, November 3. The season has been a hard one for the average farmer. Potatoes have rotted badly on heavy soils. Wheat and corn will not pay cost; probably neither crop will average eight bushels to the acre in this county. The apple crop very light; oats good; hay an average crop in quantity but inferior in quality.

——— SAMUEL H. HICKS, Enfield Centre, November 5. There is no clover seed threshed yet, but the large kind has the appearance of being better than it has been before in a number of years. No small kind at all; the second crop headed, but did not blossom. Old fields of clover look better than for a number of years. The worm that has injured the root does not seem to have done any damage this fall and the large kind bids fair for a good crop next year on the same ground cut this year.

Onondaga Co., SIDNEY LEWIS, DeWitt, October 31. The corn was drowned out on the lowlands and ripened late on the upland, the weather having been too wet and cold. Potatoes on upland are a large crop, but have rotted about one-sixth, the sound ones of good size and quality; they drowned out on lowlands. Our wheat was a total failure.

Oswego Co., DAVID L. BROWN, Clifford, November 5. We have had a remarkably wet, cold season, with early frosts. The late-planted corn was very materially injured. Buckwheat was nearly a failure, in consequence of the untimely frosts, also late-planted potatoes.

——— C. V. HARTSON, Union Square, November 2. A cold and wet summer; early and severe frosts (very unusual in this locality) have materially injured corn, beans and grapes, but this is a dairy district and the good grass has kept up the flow of milk, and butter and cheese have brought fair prices.

Cortland Co., T. H. WICKWIRE, Cortland, November 1. This section is raising large quantities of potatoes, and there were more planted last spring than in any previous year. The yield has been good.

——— IRA L. LITTLE, Marathon, October 29. Corn nearly all killed by frost; only an occasional field, on high and dry ground and early planted, ripened. Potatoes, on account of the wet season, not very thoroughly cultivated; many fields hurt by frost; the Late Rose considerably affected by rot.

Madison Co., E. F. LEWIS, Lenox, November 1. It is difficult to estimate the corn crop, as so much has been injured by frost on the lowlands and the months of July, August and September were unfavorable for the growth and maturing of the crop anywhere, so that there will be much soft corn. Potatoes would have been an extra crop but for the blight and rot.

——— TRUMAN BAKER, Earlville, November 1. Owing to the early frost; the corn crop is nearly a failure; there is not one-third the usual amount. The yield of potatoes is good and of good quality. Some kinds rotted badly. Champion of Scotland succeeded best in this vicinity.

Oneida Co., L. L. WIGHT, Whitesboro', November 1. We have had the coldest and wettest season for over thirty years; hay crop abundant; oats, the best I ever knew; rye, good; wheat, half a crop; corn, almost nothing; corn-fodder, worthless; apples, next to none. It does not pay to make butter or cheese, even if cows give six thousand pounds of milk per year.

——— JONATHAN TALCOTT, Rome, November 1. The season has been a very peculiar one. The spring opened rather late, quite cool; more than the usual breadth of ground was ploughed and fitted for the spring crops grown here, oats, corn and potatoes. The wet commenced about the 25th of May, and from that time to the present there has been a surplus of water and many acres sown and planted in good condition have been badly injured, in many cases the crops

totally ruined. The corn crop is the lightest since the cold season of 1816. Other crops, except fruit, have been fair.

Herkimer Co., C. V. DEVENDORF, Mohawk, November 8. Upon the whole, crops were good. Peas, oats, hay, barley, wheat were much better than for years. Apples, grapes, corn and some late-planted potatoes were not out of the way of frost and blight. Should the winter not be too severe, there will be a great surplus of fodder, as we have not an average amount of live stock. What we have commands a good price. Milch cows, \$25 to \$35, calves, \$6 to \$10, yearlings, \$18 to \$24, two-year-olds, \$20 to \$30 according to quality and condition.

——— FRED SMITH, Norway, November 7. Hay crop extra large and hay cheap, great call for store cattle to winter. Dairy cows, \$30 to \$40, calves, \$6 to \$10. Nothing in the farming line pays better than poultry and eggs at present prices.

——— GEORGE P. WILCOX, Little Falls, November 5. The undersigned has a good crop of old fashioned Pinkeye potatoes, a variety it has cost five years of experimenting to regenerate.

Otsego Co., L. L. FRENCH, Richfield Springs, November 2. The frost of September 10th did great damage to corn, both that grown for grain and that for fodder. My son, near me, lost between eight and ten acres, that was as nice as I ever saw, intended to be put in silo. The bean crop was a total loss. A neighbor expended a ton of phosphate on buckwheat and the frost took it in the blow he lost the whole.* Where the crop was sowed early it was good. Our hay and oats were good. We have had very nice weather for getting roots and doing fall work.

——— AMOS MATTESON, South Hartwick, November 3. Our crops are all fair, except corn and apples. Oats made a very heavy yield, ranging from forty to sixty-five bushels. I had on four and one-eighth acres two hundred and eighty-five bushels.

——— H. K. JARVIS, Cooperstown, November 5. The early frost very nearly destroyed our corn and buckwheat, and hurt hops and aftermath, making poor pasturing, and consequently not as much butter and cheese as usual.

——— A. G. MURPHY, Middlefield, November 1. Fall feed rather better than usual and, owing to cool weather, dairy interests are prospering better than for previous years.

——— N. A. MARCY, Burlington Flats, November 5. This is a dairy and hop district. Our farmers plow the land when the grass runs out, and it is planted the first year to corn and potatoes, and the second year usually sowed with oats and seeded down. This gives a good crop each year, if the season is favorable, and an excellent hay crop for three or four years after, provided the land has been top-dressed when sowed with oats and seeded.

Fulton Co., LEVI T. MARSHALL, Gloversville, November 1. The season has been favorable for most crops, except corn, late-sowed grain and apples. Pears and plums have been very abundant, while grapes, owing to the early frost, were almost a failure. There is very little clover-seed grown in this county, and it is this year of poor quality, injured by the early frost in September, and by drought in August. It is said that only a quarter of an inch of rain fell in the month of August, the drought preventing the growth of aftermath, and of late oats and buckwheat.

Montgomery Co., ALFRED DE GRAFF, Fonda, November 2. Most of the crops are equal to the average, except hay and corn. The quality of the timothy hay is poor on account of too much clover springing up in the meadows, and the timothy being winter-killed. The weather was too dry after harvest for the clover to grow up for a good yield of seed.

——— G. H. F. VAN HORNE, Fonda, November 3. Dry weather reduced the crop of clover seed. Buckwheat is almost a failure. Fall pastures very fair. Crops in general a good average.

Schoharie Co., A. G. BALDWIN, Gilboa, November 1. The corn crop has a loss of about one-half by the early frost. No finer potato crop has been grown in this

* But the frost has not hurt the phosphate.— [SEC.]

locality in thirty years. Buckwheat is about a two-third crop. The hop crop will average ten to fifteen per cent better than last year.

——— M. S. WILCOX, Jefferson, November 3. The oat crop has been large. Hay hardly up to the average. Apples few, and those mostly poor and wormy.

——— A. R. HUNTING, Gallupville, November 3. The autumn has been favorable for the gathering of crops. There has been sufficient rain to help fall pasturage and for plowing, but not enough to raise wells and springs.

——— N. MANNING, Middleburgh, November 5. The fall of rain has been sufficient to keep vegetation green and growing. Therefore wheat and rye look well, but wells have been dry and small streams, though not so many as last year at this time.

Washington Co., ZERAH RIDER, Cambridge, October 30. Hay good, but the drought which began in July and extended into October cut short the crop of corn and buckwheat. Neither will be over half a crop. Other crops generally good.

——— W. H. COOK, Hampton, November 1. The season began with a late spring in which no maple sugar of any amount was made. This was followed in early summer by drenching rains, which worked injury to many crops, and in August by drought of unusual length and severity. Then came early frosts destroying the corn crop and so ending this, to the agriculturist, remarkable year.

——— J. C. CORNELL, North Argyle. The potato crop is better than last year. Probably the corn crop is the poorest in ten years. Sheep and cattle are coming into winter quarters in good condition.

——— A. G. MEIKLEJOHN, Putnam Station, November 7. There is no clover seed saved within a radius of one hundred miles, although clover grows luxuriantly on nearly all our soils. Three to eight bushels of prime seed might be obtained, worth from \$15 to \$40 per acre, yet this item of income has never seemed to enter into the economic calculation of the farmers of the north-eastern part of the State.

Saratoga Co., SEYMOUR GILBERT, Saratoga Springs, November 3. Corn was backward, owing to the cold and wet weather in the early part of the season, and the unusually early frost made much soft corn. Buckwheat is an entire failure by reason of dry weather late in the season, and early frost. Wheat and rye look well. Fall feed has been very poor.

——— C. E. AMBLER, Saratoga Springs, November 6. All crops looked well until July 20 when the dry weather set in, the worst drought experienced for many years.

Schenectady Co., J. J. DE FOREST, Duanesburgh, November 3. The early part of the season was very good. After harvest a severe drought set in. We have been feeding hay since October 1.

Rensselaer Co., ABEL MERCHANT, Nassau, November 1. The potato crop is large. Other crops are only fair, except apples which are a poor crop.

——— H. WEIR, Johnsonville, November 2. The season has been a remarkably dry one, nevertheless the crop of potatoes and oats have been better than usual, especially potatoes. Rye equal to last year, but corn and buckwheat light. Seeding is a failure; so with fruit of nearly all kinds.

Albany Co., JOHN C. BOGARDUS, Knox, October 29. The crop of clover seed is the largest and the best I have ever seen. The corn crop promised, by the growth of stalks, to be one of the best ever raised here, but owing to the sharp drought in the filling time, and the untimely frost, it is one of the poorest in my remembrance, much of the corn being soft. The buckwheat crop, for which this section is famous, is rather light for the same causes. Farmers in this section have come to the conclusion that to secure a heavy crop the ground must be fall-ploughed.

——— HENRY CALLANAN, South Bethlehem, November 1. Crops upon the whole have been fair. Labor has been higher than last year. Prices not so good. Very light crop of apples. Pears, plums, peaches and grapes good.

Columbia Co., E. W. BUSHNELL, Hillsdale, November 6. The corn crop is better than last year ; as far as I can ascertain, not much hurt by the frost — a fine yield. The potato crop is much larger.

Greene Co., B. G. MORSS, Red Falls, October 30. Season too wet, too dry, frosty, cold. Butter low, stock low. Hard on farmers.

Dutchess Co., NEWTON REED, Amenia Union, November 3. A few fields of corn injured by frost, which seemed to go in limited lines. Generally there is no more than the average of soft corn. The stalks are not quite as valuable for fodder as usual.

Orange Co., HENRY E. ALVORD, Mountainville, October 31. A moist, mild summer, with a dry September. A good deal of August seeding of grass, which started well, but dried out in September. October moist again, closing with much-needed, copious rains. No serious loss from early frosts ; some grapes cut off. Fruit crop heavy, except apples.

—— J. M. MORRISON, Montgomery, November 2. Severe drought and heavy frosts early in September have been very unfavorable, especially as to the ripening of corn, and to fall pasture.

—— HORACE MCBRIDE, Middletown, November 3. The summer and fall have been most favorable ; the frequent rains have kept vegetation fresh and crops have generally been above the average. Grass and grain appear in better condition than usual to withstand the winter. The yield of potatoes has been the largest and finest for many years. The quantity of milk has been greater than usual, and the quality has been improved, and more satisfactory prices have been obtained in consequence of the milk producers' organization.

—— SAMUEL PARSON, Oxford Depot, November 5. The season has been a good one for all crops. Corn hurt by frost, but we have a fair crop. I never saw a better crop of potatoes. This is a great county for onions, and they are a large crop this season.

Rockland Co., JOSIAH FELTER, Haverstraw, November 1. There has been a very large crop of potatoes in this county, fully fifty per cent larger yield than last year. The weather has been very favorable for winter grain and clover seeding this autumn.

Queens Co., JOHN A. KING, Great Neck, November 6. Winter grain is looking very well, and autumn pastures better than could have been expected after the drought of late summer and early September. Larger quantity of rye on account of the great value of the straw. Apple crop very indifferent, pears abundant.

—— BENJAMIN D. HICKS, Old Westbury, November 6. When the potato crop was ripe, some farmers found a decided appearance of rot, and fears were felt of wide-spread injury to this important crop. Fortunately the disease was confined to a few farms and disappeared in a short time. Our farmers have enjoyed a fairly profitable year.

—— ISAAC H. COCKS, Old Westbury, November 7. At this place, fine pasture ; turnips, beets, carrots, cabbage, fodder corn, etc., good crops.

Suffolk Co., WILLIAM CROZIER, Northport, November 7. Fall pasture never was better ; hay plenty ; potatoes, fully double last year ; wheat, the best crop we have had for years.

Chautauqua Co., O. STODDARD, Busti, November 1. It has been a poor year for farmers, more so than I ever knew it before for forty years. No corn, no apples, no buckwheat, no beans. Not more than one farmer in ten but will have to buy potatoes.* Very little barley and that poor. Winter wheat when threshed does not yield as expected, about five-eighths of a fair crop.

Cattaraugus Co., F. LARRABEE, Eddyville, October 31. The corn crop was entirely destroyed by frost. I do not believe there will be enough in town for seed ; oats good ; hay first-rate crop, but bad weather to cure it, so we have inferior hay this season.

—— HALSEY SAFFORD, East Otto, November 1. Corn is a failure in Cattaraugus county this year. As far as I have seen, our potato crop is good, some rot on wet land, but not much.

——— H. S. HUNTLEY, Little Valley, November 1. Hay, oats and potatoes were good crops. Corn and buckwheat were injured badly by frost the 10th of September and consequently the yield is light, though not a total failure. We think each about half of an average crop. Apples a light crop. Winter wheat is looking very well, though not very much is grown. Great plenty of fodder, and dairy cows command a good price.

Allegheny Co., A. L. LITCHARD, Rushford, October 29. This is a cheese county and that is all that lets farmers out. Cheese has brought a fair price, and the cows have done well, and we have plenty to winter them on.

——— J. M. DAVIDSON, Wiscoy, November 2. Many fields of corn in this section are a perfect failure, owing to the cold, wet season and early frost. Wheat is very small, having been sown late and cold weather for it to start. Some fields of potatoes have rotted very badly, others but little; on the whole we have a good crop in quantity, but not in quality.

——— WILLIAM ORMISTON, Cuba, November 3. Attending some of the Western fairs this season, I have had a chance to see the crops in Pennsylvania, Ohio, Michigan, Illinois, Iowa and Missouri. I have not seen an orchard that had even one-fourth of a crop of apples, and the quality such that in ordinary seasons they would be considered poor culls. Potatoes were very good. I saw very few pieces of good corn east of the Mississippi, and none of it was ripe when the early frost cut it. In Iowa the growth was better and some of the corn on high land escaped the first frost, so there will be some sound corn there.

The blight affected many of the potatoes in this section, and wherever it did they rotted. With us, Queen of the Valley had the largest yield, but rotted the worst. But just about the time the potatoes had got their growth, I went through the field in different directions and pulled up the tops of some hills to see how the yield would be, then covered the potatoes up again, and when we dug them I did not find a potato rotted where the potatoes had been severed from the vines as soon as matured, though the next hill that had not been disturbed was, perhaps, all rotted.

——— WILLIAM M. WHITE, Canaseraga, November 15. Pasture has been unusually fine all the season. The season has been a very wet one and cold, the last year peculiarly cloudy and dark. Clover hay has been hard to cure. Silo corn was badly frosted and small; eighteen acres gave only one hundred and eighty tons, at the cost of \$1.40 per ton, in the pit.

Steuben Co., R. E. ROBIE, Bath, November 2. Potatoes rotted badly and the season has generally been a poor one for farmers and vineyardists. The early September frosts all but ruined the corn and buckwheat, while the frosts of October froze the grapes badly in our Lake Keuka region. All crops of the year have been poor except grass. Apples hardly worth picking.

——— LYMAN AULLS, North Urbana, November 2. The early frost did great damage to our corn; about one-half will be soft corn. Buckwheat was greatly damaged, but is a fair crop. Nearly the entire crop of grapes was frozen.

——— JAMES L. PACKER, Corning, November 4. This has been a poor year for farmers; wheat very light; potatoes rotted badly; corn, buckwheat and sugar cane ruined by the frost. Apples are a light crop of inferior quality. Cattle and sheep have done very well.

Chemung Co., G. A. GOFF, Jr., Elmira, October 31. Winter wheat is looking fine; even the later-sown fields have already made sufficient top growth. Potatoes have rotted to a considerable extent. The barley crop is rather light. Spanish or hybrid tobacco has been selling at high figures, for the best lots sixteen to twenty-one cents per pound. Seedleaf is quiet.

——— JAMES H. VAN DUZER, Horseheads, November 1. The early frost killed the corn while in the milk. With good weather for ripening the corn crop would have been good. Potatoes have rotted badly; Queens, in some places, over one-half, but I think the average will be one-half.

* W. H. Jones, Jamestown, and Thomas Thompson, Sinclairville, report good crops of potatoes in their districts.

Tioga Co., J. S. STANCLIFT, Spencer, November 1. The potato crop would have been larger than for twenty years but for the rot. Some kinds, as Snowflake and Queen of the Valley, are rotting badly. The Burbank's stand it better than any other kind, except the Early Rose, which have done better with us this year than for a long time.

——— STEPHEN DARBONNIER, Berkshire, November, 2. The quantity of produce is moderate, wages high and prices low. The fall feed has been remarkably good; a greater amount of butter than usual has been made in October and a large yield for the season, but the price is lower, I think, than since 1879. Corn and buckwheat almost entire failures. Where buckwheat was early and ripened before the frost it is a heavy yield. Potatoes rot badly.

——— O. S. RANDALL, Newark Valley, November 8. Potatoes are becoming the principal crop with us, and the great demand among farmers is for machinery for cultivating and harvesting them. The practice of selling all our calves for veal is fast reducing our stock of neat cattle.

——— LOUIS P. LEGG, Jenksville, November 10. All the products of the farm are very dull and prices away down. Cows, ten per cent lower than last year. Sheep and lambs a drug in the market. Potatoes are twenty-five cents and dull at that. Good butter slow at twenty cents per pound, in oak.

Broome Co., GEORGE SCHERMERHORN, Killanoy, October 29. Hay was good, but the bulk of it put in in bad condition; the yield of oats good.

——— BELDEN ALLEN, Maine, October 30. A very cold season which kept corn back, and the early frost destroyed corn and beans and nearly destroyed late-sown buckwheat. Our Rose seedling potatoes rotted badly.

——— GEORGE A. DAY, Upper Lisle, November 5. Corn crop nearly a failure, a good many pieces not worth husking. Winter grain is looking fine. Potato crop good and the rot not very bad.

——— E. G. CRAFTS, Binghamton, November 8. Potatoes are splendid and abundant, selling from thirty to forty cents.

Delaware Co., IRA E. SHERMAN, Sidney Plains, November 1. The season has been an unusual one, dry in the spring and autumn, very little summer heat. Early frosts have been destructive to corn and buckwheat. Most of the corn will be fed without husking. On the whole, a disastrous year for the farmers of Delaware county.

Sullivan Co., F. S. COUCH, Glen Wild, November 3. In the early season pastures were good; there was a fair yield of hay; oats were very fine: but the cold wet spring kept corn back and the early frosts injured it, and the buckwheat, badly. A fall drought cut short the pastures. Wheat and rye were good, although but little wheat is raised. Apples were almost a complete failure, though a few orchards gave fair crops.

Lewis Co., E. CROFOOT, Turin, November 1. There is but little good sound corn harvested in this section. Late-planted potatoes also suffered considerably by the frost, and on moist land the crop was injured by the excessive rains, but the large acreage planted gave us a good average crop. The apple crop is almost an entire failure; small fruits have been good.

——— F. H. MCNITT, Copenhagen, November 8. It has been a good year. Grazing cattle have come to the barns fat. We have an abundance of hay, not of the best quality.

Jefferson Co., W. A. IRWIN, Stone Mills, October 31. Pastures are very short on account of cold weather, although we have had plenty of rain.

——— W. H. GRENNELL, Pierrepont Manor, November 1. Fall weather has made much grass so that cows have kept their flow of milk later than usual.

——— A. P. SIGOURNEY, Watertown, November 1. Much loss has been sustained by farmers who planted beans and cucumbers for seedsmen. Hay and cereals are abundant, but the former not of so good a quality as in 1882.

——— F. M. PARKER, Watertown, November 3. The corn crop in this county is not over half an average crop and not more than half of that will be sound

enough to crib. There are usually a great many cucumbers, squashes and melons grown here for the seeds. This year they are a total failure. We are having fine weather and more ploughing than usual is being done.

St. Lawrence Co., C. A. WOOSTER, Hammond, November 1. Corn in a few instances has been a success. I have a field that will compare with that of any year's growth, both in quality and quantity, while nine-tenths of all planted is almost a failure. The chinch bug is making great ravages in this town, destroying whole meadows, by eating the roots of all kind of grasses, except quack, but not clover.

——— H. W. S. KNOX, Canton, November 1. Potatoes on clayey ground in many places are hardly worth digging.

——— ADAM McCORMICK, Lisbon, November 3. Potatoes on high land are a wonderful good crop and of fine quality. Occasionally on low land, rot has done some damage.

——— S. O. CHILD, De Kalb Junction, November 3. The early frost injured our fall feed and corn fodder very much. In consequence cows have not given more than two-thirds the usual quantity of milk, and the make of fall butter will be much below the average.

——— L. E. WINSLOW, Russell, November 4. Potatoes have rotted badly on all but light soils. Wheat, barley, oats, etc., are yielding considerably less than was expected from the bulk of straw.

——— H. O. SWEET, Madrid, November 5. Cows have given only about half the milk they gave last fall.

——— H. D. LEONARD, Crary's Mills, November 7. Grass is all killed by the hard frost. Stock is high on account of our big fodder crop.

Essex Co., WALTER MERRILL, Port Henry, October 30. The season, since July, has been remarkably dry and fall crops have not done well.

——— J. B. NORTH, Westport, November 2. The drought commenced the first of July. Early potatoes fair; late ones injured by drought and frost.

Warren Co., W. H. WALDRON, North Creek, November 2. Hay and oats were good crops, more than average; buckwheat and corn are failures, from dry weather and frost. Early-planted potatoes middling; late-planted ruined by drought.

——— NELSON HULL, Glens Falls, November 6. A very favorable season for crops, with few exceptions; corn injured by early frost in many places; apples scarce.

TABLE showing, in degrees and tenths of the Fahrenheit scale, the Mean Monthly Temperature, during the growing season (April to October) at Albany, Oswego and Buffalo, N. Y., for ten years, 1874 to 1883, and at Rochester, N. Y., for nine years, 1874-1882, and for April and May 1883; the data furnished by the Chief Signal Officer of the U. S. Army.

YEARS.	APRIL.			MAY.			JUNE.			JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			MEANS FOR THE SEASON.										
	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.								
1874.....	36.6	36.8	35.5	34.5	56.5	54.4	55.5	52.5	66.9	62.7	66.1	64.0	69.9	70.2	70.8	69.0	66.8	67.9	67.5	63.1	65.6	65.3	65.3	49.1	50.4	49.2	49.9	58.1	58.3	58.6	57.5	
1875.....	39.1	38.9	39.0	36.7	57.3	53.3	56.2	51.8	66.9	64.9	66.4	63.9	69.8	68.2	69.3	67.5	70.7	69.2	67.6	67.0	59.0	57.8	58.0	46.5	47.7	46.2	46.7	53.4	57.3	67.5	55.9	
1876.....	24.9	41.5	41.7	38.7	57.1	53.5	55.4	50.8	71.5	69.3	69.8	68.0	73.7	71.0	71.9	70.7	72.7	72.2	73.3	72.1	59.1	59.8	58.1	46.6	47.2	45.6	45.9	57.9	59.2	59.4	57.9	
1877.....	40.3	44.1	45.1	43.5	57.5	54.0	56.7	53.6	68.2	65.4	66.8	64.8	71.6	71.4	72.1	70.1	71.8	71.9	71.0	71.1	63.8	64.8	63.8	49.5	53.0	51.6	51.8	60.4	60.6	61.0	59.8	
1878.....	51.5	52.4	52.5	50.0	56.5	54.9	55.8	53.5	65.0	64.7	65.2	63.3	73.6	74.5	74.1	73.5	70.2	71.2	70.9	71.0	63.7	65.3	64.4	49.4	52.9	54.4	52.9	61.9	62.5	62.2	61.0	
1879.....	42.0	42.8	42.1	38.6	60.8	57.8	60.0	55.5	66.0	62.8	65.5	62.9	71.1	71.1	71.9	71.7	67.9	68.3	68.3	68.1	59.6	60.2	59.4	56.1	57.1	57.6	58.3	60.5	60.0	60.7	59.2	
1880.....	49.7	45.4	45.2	43.3	66.4	61.5	64.2	59.7	71.8	66.4	68.4	66.5	74.9	70.9	70.4	70.3	70.9	68.4	68.7	68.6	64.9	63.4	62.8	51.8	50.4	49.4	48.0	64.3	60.9	61.3	59.9	
1881.....	47.0	40.5	41.5	36.3	64.3	57.9	61.6	56.8	65.1	58.2	61.0	59.6	73.9	70.4	71.7	70.3	73.3	71.2	71.8	71.5	71.0	70.3	71.2	71.3	55.1	52.6	52.5	54.0	64.2	60.2	61.6	60.0
1882.....	47.0	41.4	41.3	40.8	55.5	50.4	50.1	49.3	69.0	62.8	63.3	62.4	70.8	70.3	68.2	67.8	73.0	70.2	68.1	68.9	65.0	62.0	61.6	62.2	56.4	54.4	53.7	55.0	62.4	58.8	58.0	58.1
1883.....	47.3	41.4	40.8	40.2	59.1	51.6	51.4	59.0	72.0	65.4	63.8	72.8	67.2	67.2	69.9	65.7	65.8	61.2	57.5	57.5	50.9	49.5	48.4	61.9	56.9	56.1
Mean for the ten years*	42.5	42.5	42.5	40.3	59.1	54.9	56.7	53.3	68.2	64.2	65.8	63.9	72.2	70.5	71.2	69.8	70.9	69.6	69.7	69.1	63.0	62.8	62.7	61.2	51.5	51.9	51.9	51.0	61.1	59.5	60.9	58.5

* Except for Rochester, at which place observations were discontinued from June 15 to October 22, 1883; so that the mean temperature at that place for only the months of April and May for ten years, and for the other months, and for the seasons for nine years are above given.

TABLE showing, in inches and hundredths, the rainfall during each month of the growing season (April to October) at Albany, Oswego and Buffalo, N. Y., for ten years, 1874-1883; and at Rochester, N. Y., for nine years, 1874-1882, and for April and May, 1883; the data furnished by the Chief Signal Officer of the U. S. Army.

YEARS.	APRIL.			MAY.			JUNE.			JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			TOTALS.										
	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.	Albany.	Oswego.	Rochester.	Buffalo.								
1874.....	4.97	2.26	4.99	2.44	2.32	2.08	2.98	3.04	6.18	4.98	2.75	1.50	1.94	7.62	4.37	4.64	1.94	0.29	0.84	0.46	4.01	3.19	2.73	3.39	1.74	2.05	2.17	2.12	23.10	22.47	20.83	17.59
1875.....	3.65	2.08	1.99	1.52	2.57	3.38	2.76	3.37	3.98	3.03	3.33	2.88	2.46	3.43	2.12	3.42	6.55	2.46	5.08	3.45	2.63	4.23	2.87	4.09	5.97	3.04	2.41	3.04	27.81	21.65	20.56	21.77
1876.....	3.51	2.61	1.99	3.28	2.76	1.22	1.55	1.45	4.40	4.01	3.33	1.24	4.97	3.30	4.59	4.77	0.53	0.45	0.36	0.65	5.17	4.13	5.69	4.35	1.64	3.41	1.26	3.56	22.98	19.13	18.77	18.70
1877.....	1.42	1.66	2.67	2.24	2.77	0.54	1.20	0.53	4.00	3.33	3.16	4.86	4.00	5.89	4.42	1.85	4.57	2.19	2.98	2.95	1.82	2.83	2.31	2.55	7.86	2.37	3.06	6.17	26.44	18.81	19.80	21.15
1878.....	3.99	3.42	3.71	4.71	3.65	3.69	2.25	3.36	4.54	3.28	1.69	3.46	5.52	3.91	3.72	6.80	3.76	4.41	3.24	3.17	3.20	2.62	1.35	7.44	3.37	7.55	3.83	6.86	28.03	28.88	19.79	35.80
1879.....	3.17	0.85	1.44	1.36	0.89	1.90	1.35	1.11	4.62	3.49	3.73	2.48	5.10	3.56	4.61	2.68	4.25	3.51	3.47	3.62	3.47	2.95	2.80	2.96	2.45	4.32	5.31	4.87	22.74	17.93	18.07	14.51
1880.....	2.75	2.28	2.12	2.53	3.35	4.06	5.54	3.05	2.31	3.27	2.45	2.97	3.78	1.74	3.49	3.31	2.84	3.25	5.53	6.07	2.86	1.51	2.72	2.96	2.45	4.32	5.31	4.87	20.34	20.34	27.16	25.76
1881.....	13.40	1.19	1.15	0.76	3.90	2.41	5.86	2.18	3.76	2.98	3.20	4.15	2.22	1.73	2.20	2.17	2.07	1.69	1.44	0.85	2.38	0.76	1.82	1.21	3.19	4.61	3.33	7.33	30.92	15.37	19.30	18.65
1882.....	1.27	2.08	2.18	2.23	4.15	4.83	5.57	6.89	3.98	3.72	2.50	2.96	3.97	1.12	1.17	1.19	1.38	3.09	2.73	2.04	7.79	2.42	0.82	2.21	0.27	0.50	0.62	1.10	22.81	17.76	15.59	18.62
1883.....	2.45	1.39	1.41	2.34	3.20	7.03	6.53	6.45	6.30	4.58	.....	5.46	5.96	3.21	....	3.35	3.69	2.16	.....	2.30	3.19	2.32	.....	2.11	3.49	1.94	.....	3.58	28.48	22.63	25.59	
Means.....	4.08	1.98	2.33	2.34	2.96	3.15	3.56	3.15	5.04	3.67	2.90	3.19	3.99	3.55	3.41	3.42	3.16	2.35	2.85	2.50	3.45	2.70	2.57	3.28	3.12	3.15	2.55	3.94	25.37	20.51	19.99	21.81

STATE OF NEW YORK.

No. 147.

IN ASSEMBLY,

APRIL 10, 1884.

REPORT OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 376, G. O. 371, entitled "An act to provide for adjusting and enforcing the claim of the town of Corn- ing against the New York, Lackawana and Western Railway Company by reason of the construction of the railway of said company upon and along that portion of a highway of said town running through the Chemung Narrows, and appointing commissioners for that pur- pose," reported in favor of the passage of the same with amendments as follows :

Strike out section 4 and insert in lieu thereof as follows : "All mon- eys received by said commissioners shall be applied to the purchase of the bonds of said town or invested as a sinking fund for the payment of the same in the manner provided by law, or the said moneys may in the discretion of the commissioners, hereby appointed, be applied to the building or repair of bridges or payment of the lawful expenses of said town to be audited as other accounts against said town."

Said bill was ordered reported by the following vote :

For the Affirmative.

Kittle	Allen	Priddy
Childs	Geddes	Price
Beckwith	Haskell	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 550, G. O. 528, entitled "An act to provide for the appointment of commissioners to prepare and report to the Legislature a bill to facilitate and lessen the expense of the transfer of land and dealing therewith in certain cities of this State," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Price
Childs	Haskell	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 455, G. O. 177, entitled "An act to amend an act entitled An act to amend the act entitled 'An act to revise, amend and consolidate the several acts relating to the village of Whitesboro,'" passed February 12, 1859, and several amendments thereto, reported in favor of the passage of the same with amendments as follows :

Section 1, strike out all down to line 14, and insert "Section 1 of chapter 10 of the Laws of 1859, entitled 'An act to amend an act entitled 'An act to revise, amend and consolidate the several acts relating to the village of Whitesborough, is hereby amended so as to read as follows."

Section 2, strike out all down to and including line 5, and insert as follows: "Section 2 of said act is hereby amended so as to read as follows."

Section 3, strike out lines 1 and 2 and insert, "Section 5 of said act is hereby amended so as to read as follows."

Section 4, strike out lines 1 and 2, and insert, "Section 6 of said act is hereby amended so as to read as follows."

Section 5, strike out first 3 lines and insert, Section 7 of said act is hereby amended so as to read as follows."

Section 6, strike out lines 1 and 2 and insert, "Section 9 of said act is hereby amended so as to read as follows."

Section 7, strike out lines 1 and 2, and insert, "Section 14 of said act is hereby amended so as to read as follows."

Section 8, strike out line 1, and insert, "Section 15 of said act is hereby amended so as to read as follows."

Section 9, strike out lines 1 and 2, and insert, "Subdivision 4 of section 16 of said act is hereby amended so as to read as follows."

Section 10, strike out all down to and including line 5, and insert, "Subdivision 7 of chapter 16 of said act is hereby amended so as to read as follows."

Section 11, strike out line 1, and insert, "Section 19 of said act is hereby amended so as to read as follows."

Section 12, strike out line 1, and insert, "Section 20 of said act is hereby amended so as to read as follows."

Section 13, strike out lines 1 and 2, and insert, "Section 21 of said act is hereby amended so as to read as follows."

Section 14, strike out lines 1 and 2, and insert "Section 23 of said act is hereby amended so as to read as follows."

Section 15, strike out first 4 lines, and insert, "Section 35 of said act is hereby amended so as to read as follows."

Section 16, strike out first 3 lines and insert, "Section 36 of said act is hereby amended so as to read as follows."

Section 17, strike out line 1 and insert, "Section 41 of said act is hereby amended so as to read as follows."

Section 18, strike out line 1 and insert, "Section 42 of said act is hereby amended so as to read as follows."

Add, as section 19, as follows: "All acts or parts of acts inconsistent with the provisions of this act are hereby repealed."

Also, add as section 20, as follows: "This act shall take effect immediately."

With the title also amended so that it will read, "An act to amend chapter 10 of the laws of 1859, entitled an act to amend the act entitled 'An act to revise, amend and consolidate the several acts relating to the village of Whitesboro,' and several amendments thereto."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 619, G. O. 617, entitled "An act to legalize all medical degrees and diplomas granted prior to the passage of this act by the 'United States Medical College in the city of New York,'" reported in favor of the passage of the same with amendments, as follows :

Strike out all after the enacting clause and insert :

SECTION 1. All medical degrees and diplomas granted at any time prior to the fourth day of April, 1883, by the officers, trustees and faculty or other authorities of the medical school, heretofore known and designated as the United States Medical College in the city of New York, to the students or graduates thereof, who shall have pursued in said institution the course of study prescribed by its rules and regulations and which degrees or diplomas have been conferred after examination, entitling said students and graduates to the same, are hereby legalized and declared to be in all respects valid and of equal sufficiency, force and effect as medical diplomas, certificates or licenses granted by any lawfully constituted or incorporated medical society, college, university or chartered medical school in this State.

§ 2. This act shall take effect immediately.

Also, with an amendment to the title by striking out the word "all" in line one.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Haskell
Kittle	Geddes	Price
Childs	Walrath	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 287, G. O. 284, entitled "An act to amend chapter 141 of the Laws of 1871, entitled 'An act to abolish tolls on certain roads and bridges in the towns of Newtown and Flushing, in the county of Queens, and provide compensation therefor,'" reported in favor of the passage of the same with amendments, as follows :

Section 2, strike out all after "property" in line four, down to and including the word "law" in line six, and insert "in said town not included within the boundaries of any incorporated village."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 540, G. O. 519, entitled "An act to amend chapter 299 of the Laws of 1883, entitled 'An act to provide for the enrollment of the militia, for the organization and government of the national guard of the State of New York, and for the public defense, and entitled the Military Code,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Price
Childs	Haskell	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 247, G. O. 247, entitled "An act to establish a State board of pharmacy, and to regulate the practice of pharmacy throughout the State of New York, except in the counties of New York, Kings and Erie," reported in favor of the passage of the same with an amendment to section 14, so that it will read: "This act shall not apply to the counties of New York, Kings and Erie."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Haskell
Kittle	Allen	Priddy
Childs	Geddes	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 364, G. O. 359, entitled "An act in relation to extending certain streets and avenues in the city of Brooklyn beyond high-water mark," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Geddes	Price
Childs	Haskell	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 494, G. O. 443, entitled "An act to authorize the registrar of arrears of the city of Brooklyn to accept

certificates of sales for taxes in said city, made since the year 1862, in payment of certain taxes," reported in favor of the passage of the same with an amendment, by striking out all after the enacting clause, and inserting :

SECTION 1. The comptroller of the city of Brooklyn is hereby authorized forthwith to pay to the holders of certificates of sales made since the year 1862, for the nonpayment of taxes levied or attempted to be levied in said city since the year 1861, and which were void by reason of the failure of the assessors of said city to swear to the assessment-rolls as required by statute, the purchase-price appearing upon the face of said certificates, and also the amounts appearing upon the liber of sales in the office of the registrar of arrears of said city, on the first day of October, 1883, to have been paid by the purchaser or his assigns for taxes, water rates or assessments on account of the purchase, excepting such as were levied subsequent to the 30th day of June, 1882.

§ 2. Leases executed and delivered upon sales for the nonpayment of any of the void taxes mentioned in the first section of this act shall, for the purpose of payment thereunder, be held and considered to be certificates of sale.

§ 3. The payments authorized to be made under the provisions of this act shall be made by the treasurer of said city upon the warrant of the mayor and comptroller thereof out of moneys collected from the taxes, assessments and liens fixed and certified under the act entitled "An act concerning the settlement and collection of arrearages of unpaid taxes, assessments and water rates in the city of Brooklyn, and imposing and levying a tax, assessment and lien in lieu and instead of such arrearages, and to enforce the payment thereof," passed March 16, 1883.

§ 4. Nothing in this act contained shall be held or construed to abrogate, in any way limit or affect any defense the city of Brooklyn may have against the said certificates of sale in case the holder or holders thereof shall refuse to accept the payments by this act authorized to be made, and to release the said city from all claims thereunder ; and all persons accepting any such payment shall, as a condition of payment, release the said city of and from all claims against it upon the certificates held by them or growing out of the sales therein mentioned.

§ 5. This act shall take effect immediately.

Also change the title so that it will read : "An act to authorize the comptroller of the city of Brooklyn to redeem certain tax certificates."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 538, G. O. 517, entitled "An act to amend chapter 441 of the Laws of 1864, and to repeal chapter 451 of

the Laws of 1880, entitled 'An act supplementary to chapter 441 of the Laws of 1864, entitled An act in relation to the performance of highway labor in Queens county,' reported in favor of the passage of the same with amendments as follows :

Section 1, line 5 strike out the words "second," and insert "third."

Also, with an amendment to the title by inserting after the word "sixty-four," in line two the words "entitled an act in relation to the performance of highway labor in Queens county."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Priddy
Kittle	Geddes	Price
Childs	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 488, G. O. 439, entitled "An act to provide for the proper removal of stable manure from the city of New York," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Kittle	Allen	Priddy
Childs	Geddes	Price
Beckwith	Haskell	Clinton — 10.
Walrath		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 534, G. O. 513, entitled "An act to amend chapter 170 of the Laws of 1866, entitled 'An act to incorporate the village of Montezuma,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 600, G. O. 569, entitled "An act to amend an act entitled 'An act to establish free schools in district No. 3 in the town of Flushing,' passed April 16, 1857, and to provide for the purchase of sites, the erection of school-houses, and the support and management of the schools in said district," reported in favor of the passage of the same with an amendment to the title by striking out the word "An act" in line 1 and inserting "chapter 638 of the Laws of 1857," also strike out the words "passed April 16, 1857."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Haskell
Kittle	Allen	Price
Childs	Geddes	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 549, G. O. 527, entitled "An act to amend chapter 547 of the Laws of 1855, entitled 'An act allowing illegitimate children to inherit real and personal property in certain cases,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Kittle	Walrath	Priddy
Childs	Allen	Price
Beckwith	Geddes	Clinton — 9.

For the Negative.

Dayton — 1.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 592, G. O. 558, entitled "An act to facilitate the transfer of stocks and registered bonds," reported in favor of the passage of the same with amendments, as follows :

Section 1, line 4, change the word "transfer" to "transferee."

And strike out all of the section after the word "unless," in line 7, and insert "the corporation or its transfer agents shall have actual or constructive notice of such trust."

Said bill was ordered reported by the following vote :

For the Affirmative.

Childs	Allen	Priddy
Beckwith	Geddes	Price
Walrath	Haskell	Clinton — 9.

For the Negative.

Dayton—1.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 277, G. O. 274, entitled "An act to amend chapter 611 of the Laws of 1875, entitled, 'An act to provide for the organization and regulation of certain business corporations,'" reported in favor of the passage of the same with amendments as follows :

Section 1, line 7, strike out the first word "or;" line 8, before the word "and," insert "not so secured."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 696, G. O. 658, entitled "An act to authorize the Brooklyn City Railroad Company to grant, sell and convey to the Broadway Railroad Company of Brooklyn, and the Broadway Railroad Company of Brooklyn to purchase of the Brooklyn City Railroad Company all the right, title and interest of the Brooklyn City Railroad Company in the Cypress Hill Extension, so called, in the town of New Lots in the county of Kings, and the real estate hitherto used in connection therewith," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 539, G. O. 518, entitled "An act to exempt the county of Chenango from the provisions and operations of chapter 346 of the Laws of 1883, entitled 'An act to provide for the construction, care, maintenance, preservation and repair of public bridges over streams or other waters forming the boundary lines of counties, and to apportion the expense thereof,'" reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 236, G. O. 235, entitled "An act for the encouragement and protection of hedges or line fences," reported in favor of the passage of the same with amendments as follows:

Section 1, line 3, strike out the first 'word, "or"; line 4, change word "line" to "live;" line 10, change word "line" to "live."

Also amend the title by changing the word "line" to "live."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Priddy
Kittle	Allen	Price
Childs	Geddes	Clinton — 11.
Beckwith	Haskell	

STATE OF NEW YORK.

No. 148.

IN ASSEMBLY,

APRIL 10, 1884.

LIST OF SPECIAL ORDERS.

Wednesday, April 16, 1884, immediately after reading the journal :

Senate bill 276, entitled "An act to provide for the construction, extension, maintenance and operation of street surface railroads and branches thereof, in cities, towns and villages."

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STATE OF NEW YORK.

No. 149.

IN ASSEMBLY,

APRIL 10, 1884.

LIST OF GENERAL ORDERS.

G. O.

678. Introduced by Mr. Clinton :

An act for the relief of the graduates of the College of Physicians and Surgeons of Buffalo.

679. (Senate.) Introduced by Mr. Daggett :

An act in relation to sealers of weights and measures in the city of Brooklyn.

680. (Senate.) Introduced by Mr. Ellsworth :

An act to amend chapter 402 of the Laws of 1882, entitled "An act to repeal certain acts and parts of acts."

681. (Senate.) Introduced by Mr. Lansing :

An act to amend the Code of Civil Procedure.

682. (Senate.) Introduced by Mr. Daggett :

An act to amend an act entitled "An act concerning the settlement and collection of arrearages of unpaid taxes, assessments and water rates in the city of Brooklyn and imposing and levying a tax, assessment and lien in lieu and instead of such arrearages and to enforce the payment thereof, passed March 16, 1883."

683. Introduced by Mr. Kelly :

An act relating to the discharge of the duties of the surrogate of the county of Kings in a case of a vacancy in the office or the disqualification or disability of the surrogate.

684. (Senate.) Introduced by Mr. Titus :

An act to amend the Code of Civil Procedure.

685. Introduced by Mr. Coffey :

An act in relation to certain sewerage and drainage in the city of Brooklyn.

686. Introduced by Mr. Hunt :

An act to amend chapter 285 of the Laws of 1878, entitled "An act to amend an act to confer on boards of supervisors fur-
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G. O.

ther powers of local legislation and administration and to regulate the compensation of supervisors.

687. Introduced by Mr. Dibble :

An act locating the offices of the several town clerks in the State of New York.

688. (Senate.) Introduced by Mr. Daggett :

An act to amend chapter 463 of the Laws of 1880, entitled "An act to amend chapter 604 of the Laws of 1875, entitled 'An act to protect the shores and bay of New York, and the seaside resorts near New York city, and to prevent the deposit of carrion, offal, dead animals, bedding or any putrid, offensive, decaying or refuse vegetable or animal matter, or any garbage or sweepings taken from the streets of any city into the North and East rivers or in the bay of New York or Raritan bay, within the jurisdiction of the State of New York, or in the waters of Jamaica bay, or in the waters of the Atlantic ocean, within three miles of Rockaway beach or Far Rockaway or Coney Island, or within less than one mile beyond the outer bar,' " and to amend section 4 of the said chapter 604 of the Laws of 1875.

689. Introduced by Mr. S. W. Johnson :

An act laying out a public park in the town of East Chester, county of Westchester and State of New York, and authorizing the taking of certain lands therefor and providing for the improvement and maintenance of said park.

690. Introduced by Mr. Craig :

An act to amend chapter 288 of the Laws of 1867, entitled "An act to amend and consolidate the several acts relating to the village of Hornellsville and the acts amendatory thereof."

691. Introduced by Mr. Veeder :

An act to amend chapter 409 of the Laws of 1883, entitled "An act to amend chapter 87 of the Laws of 1854, entitled 'An act in relation to plankroads and turnpike roads.'"

692. (Senate.) Introduced by Mr. Fassett :

An act to revise and consolidate the statutes of the State relating to the custody and care of indigent and pauper children by orphan asylums and other charitable institutions.

693. (Senate.) Introduced by Mr. Baker :

An act for the relief of Thomas Evershed.

694. Introduced by Mr. S. D. Locke :

An act to provide for the protection of the lives and limbs of workmen engaged in the building trades in this State.

695. Introduced by Mr. Horton :

An act to establish a commission of navigation of Chautauqua lake and its outlet, and in relation to navigation on the same, and to repeal an act in relation to the inspection and running of steamboats on Chautauqua lake, passed May 24, 1876, and the acts amendatory thereof.

STATE OF NEW YORK.

No. 150.

IN ASSEMBLY,

APRIL 11, 1884.

LIST OF SPECIAL GENERAL ORDERS.

The Speaker and Clerk, with the consent of the House, referred the following bills to the sub-committee of the whole :

Printed No. 301, G. O. 292. Introduced by Mr. Hodges :

An act to authorize the raising and expenditure of money for improving the condition of streets and avenues in the city of Brooklyn.

Printed No. 61, G. O. 679. (Senate.) Introduced by Mr. Daggett:

An act in relation to sealers of weights and measures in the city of Brooklyn.

Printed No. 290, G. O. 682. (Senate.) Introduced by Mr. Daggett :

An act to amend an act entitled "An act concerning the settlement and collection of arrearages of unpaid taxes, assessments and water rates in the city of Brooklyn, and imposing and levying a tax, assessment and lien in lieu and instead of such arrearages, and to enforce the payment thereof," passed March 16, 1883.

Printed No. 321, G. O. 315. Introduced by Mr. Rice :

An act to define the boundary along Hemlock lake between the towns of Canadice, in the county of Ontario, and Conesus, in the county of Livingston.

Printed No. 461, G. O. 421. Introduced by Mr. Maher:

An act to provide for the care, transportation and commitment, and the payment therefor, of lunatics, idiots, persons of unsound mind, deaf-mutes, orphans and paupers, the expense of whose maintenance and transportation is a charge upon the county of Albany, and to define the duties of the superintendent of the alms-house in the city of Albany.

Printed No. 625, G. O. 584. Introduced by Mr. Moore :

An act to establish a board of county assessors in the county of Richmond.

Printed No. 298, G. O. 289. Introduced by Mr. Hodges:

An act in relation to sewers and drainage in the city of Brooklyn.

Printed No. 492, G. O. 441. Introduced by Mr. Clarke:

An act to authorize the construction of gas works, and the manufacture and sale of gas for the purpose of lighting the streets, roads, avenues, parks and buildings in the twenty-third and twenty-fourth wards of the city of New York.

Printed No. 194, G. O. 188. Introduced by Mr. Heath :

An act to amend chapter 346 of the Laws of 1878, entitled "An act relative to the collection of taxes and assessments in the city of Brooklyn."

Printed No. 459, G. O. 420. Introduced by Mr. Earl:

An act to authorize the election of an additional justice of the peace of the city of Brooklyn, and to create an additional district therein.

Printed No. 712, G. O. 678. Introduced by Mr. Clinton:

An act for the relief of the graduates of the College of Physicians and Surgeons of Buffalo.

Printed No. 706, G. O. 515. Introduced by Mr. Sweet:

An act to amend chapter 639 of the Laws of 1868, entitled "An act to amend the act incorporating the village of Phoenix, in the county of Oswego," and the several acts amendatory thereof.

Printed No. 22, G. O. 31. (Senate.) Introduced by Mr. Lansing:

An act to prevent life insurance companies from interposing the defense of suicide in certain cases.

Printed No. 148, G. O. 150. (Senate.) Introduced by Mr. Thacher :

An act in addition to and amendatory of the several acts relating to a supply of water in the city of Albany.

STATE OF NEW YORK.

No. 151.

IN ASSEMBLY,

APRIL 17, 1884.

LIST OF SPECIAL ORDERS.

Thursday, April 17, 1884, immediately after reading the journal :

Senate bill 306, entitled "An act laying out public places and parks and parkways, in the Twenty-third and Twenty-fourth wards of the city of New York, and in the adjacent district in Westchester county, and authorizing the taking of the lands for the same."

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STATE OF NEW YORK.

No. 152.

IN ASSEMBLY,

APRIL 16, 1884.

PREAMBLE AND RESOLUTION

IN RELATION TO THE PRESERVATION OF FORESTS.

WHEREAS, Abundant experience has indisputably demonstrated, that the indiscriminate destruction of the forests, both in the Old World and the New, has been productive of lamentable results; that in consequence of the imprudent manner in which large sections of the earth's surface have been denuded of their primeval woods, periodical inundations have locally alternated with seasons of extreme drought; the natural receptacles of the rainfalls, and the snow which formed the sources of uniform water supply, and of perpetual rivers and springs have been cut off; the meteorological equilibrium of nature has been calamitously disturbed, and extensive regions of otherwise fertile territory and salubrious climate have been reduced to the condition of barren and uninhabitable wastes, and,

WHEREAS, The Adirondack wilderness constitutes the chief natural reservoir of this State, and the preservation of its woodlands is absolutely necessary to prevent the occurrence, in large portions of the State adjacent thereto, of alternate inundations and droughts, similar to those which have been productive of such disastrous sequels elsewhere; and for the maintenance of an unfailing supply of water to our canals and principal rivers and streams, and,

WHEREAS, The best energies of government should be directed toward the promotion of the happiness and prosperity of the people, and the supervision and protection of every accessible natural resource which contributes to the advancement of the agricultural and commercial interests of the State, therefore,

Resolved, That we demand the immediate passage of a law by the Legislature of this State, which shall put a stop forthwith to the further destruction of the Adirondack forests, or any portion thereof.

Resolved, That a Forestry League be organized by this meeting, the objects of which shall be the promotion, by all legitimate means, of the forestry interests of the country, and the creation of a forestry department in the National, and each of the State governments.

FRANKLIN EDSON, *Chairman*.

JOHN G. BOYD, *Secretary*.

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STATE OF NEW YORK.

No. 153.

IN ASSEMBLY,

APRIL 16, 1884.

FURTHER REPORT

OF THE SPECIAL COMMITTEE APPOINTED TO INVESTIGATE THE LOCAL GOVERNMENT OF THE CITY AND COUNTY OF NEW YORK.

To the Assembly of the State of New York, April 15, 1884:

Since handing in our last report we have been employed in investigating the police department of the city of New York; we have sat eight days, generally from ten in the morning until six in the evening; and while we have not yet finished our examination, and do not yet feel prepared to pass upon the management of the department as a whole, we are nevertheless of the opinion that the evidence already taken is sufficient to show conclusively that the present system of appointments to office in this department is radically wrong and should be changed; and we strongly recommend that the police department be included in the bill to reform civil service in cities of this State, now on its passage through the Legislature.

At present the system of appointing is as follows: In each year there are several hundred appointments to be made; and these are divided up equally among the four commissioners — or, as it is termed, each of the heads gets one-fourth of the patronage. No man can get appointed except through a letter from one of these commissioners, requesting the chief clerk to have the applicant examined as to his qualifications; the only serious part of this examination is that before the board of surgeons, who are directed to make a thorough investigation of his physical qualifications, and by the rules of the board he is rejected unless he comes up to certain requirements of height, weight, girth of chest, general health, etc. If every commissioner recommended only proper men, and if the examining board passed only those who were physically fit, this system would not work so

badly ; although even then it would be on all accounts better to have the department included with the other divisions of the city government under the civil service reform law. But in reality, where there are hundreds of places to be filled, and tens of hundreds of men who are anxious to fill them, it is physically impossible for any commissioner to have personal knowledge of more than a very small proportion of the men whom he requests to have examined ; and for the others he is obliged to rely upon the recommendations of outside parties.

It thus comes about that, except in the few cases where the applicant is a personal adherent of the police commissioner, no man can be examined for admission unless he brings a letter to the police commissioner from some prominent personage, or from some personal or political friend. Nor does any blame attach to the commissioner for receiving, nor to the outsider for sending such a letter ; under the present system it is impossible to have any man, no matter how competent, appointed unless he knows some one who can give him a letter recommending his examination ; the system alone is at fault, and the system should be at once changed. Some of these letters are from bankers, merchants and other people in private life ; but the vast majority are, and inevitably must be, from politicians of every grade. Many competent and proper men, recommended by trustworthy and reputable persons, are appointed ; but from the very nature of the system the great bulk of the appointees are simply the adherents of the various influential ward politicians.

Having obtained a letter from the commissioner, the applicant then goes before the board of surgeons ; and here, if he fails to come up to the required physical standard, he is in theory, rejected. But as a matter of fact, if he has sufficiently strong political support, he is re-examined ; and it is in these re-examinations that the worst abuses of the present system of appointment are shown.

The re-examination papers for 1883 show pretended cures of such a character, and such extraordinary changes in the physical properties of the applicants, when they had influential politicians behind them as to render it impossible to believe that the board of examiners were acting in good faith ; the conclusion is inevitable that they were under some outside pressure or influence.

Men rejected at one examination for insufficient height ; weight or girth of chest, would at the next show an increase in the necessary particulars that would seem hardly explicable on other grounds. The cases of applicants suffering from organic troubles were even more remarkable. An applicant twice rejected for syphilis was decided to be cured on his third trial ; another with varicose veins as speedily recovered ; a man was rejected for hernia, but was reported perfectly sound when his case came up again ; another had varicocele on his first trial, but not on his second, according to the report of the board (although the head surgeon actually indorsed on the back of this last report that the man still had varicocœle and was *not* cured) ; mitral insufficiency in another case was quite as temporary a defect ; and near sightedness, obesity and defective physical formation all proved equally ephemeral disabilities. In other words these re-examinations in many instances, were simply farcical. Such a state of

things would be impossible if men were appointed for merit only, and under a system that would eliminate the opportunities for showing personal and political favoritism.

We do not pretend to say that the examinations under the civil service reform law would in every individual instance work well ; nor do we say that it is impossible that changes may not be necessary, before that law can be made to work perfectly ; but we are confident that the passage of such a measure would be a step in the right direction. It would increase the efficiency of the police force, and, what we regard as quite as important, it would tend to take it entirely out of politics ; and it would certainly be a vast improvement upon the present system.

We therefore strongly recommend that the police department be included in the provision of the bill to reform the civil service in cities.

THEODORE ROOSEVELT, *Chairman.*
WM. T. O'NEIL,
GEO. Z. ERWIN,
HARTFORD D. NELSON,
THOS. V. WELCH.

STATE OF NEW YORK.

No. 154.

IN ASSEMBLY,

APRIL 17, 1884.

LIST OF SPECIAL GENERAL ORDERS.

The speaker and clerk, with the consent of the house, refer the following bills to the sub-committee of the whole:

Printed No. 313, G. O. 306. Introduced by Mr. Roosevelt:

An act to incorporate the College of Pharmacy of the city of New York.

Printed No. 195, G. O. 189. Introduced by Mr. Lindsay:

An act to amend chapter 566 of the Laws of 1869, entitled "An act to reorganize the fire department of the city of Brooklyn."

Printed No. 97, G. O. 97. (Senate.) Introduced by Mr. Gibbs:

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York."

Printed No. 621, G. O. 323. Introduced by Mr. Wilcox:

An act to amend chapter 694 of the Laws of 1867, entitled "An act in relation to the valuation of the property of railroad companies in school districts, for the purpose of taxation."

Printed No. 39, G. O. 36. (Senate.) Introduced by Mr. Titus:

An act in relation to the examination of the accounts, etc., of the surrogate's court and the transfer of the moneys and securities to the county treasurers.

Printed No. 240, G. O. 239. Introduced by Mr. C. W. Brown:

An act to amend title 2, chapter 13, part 1 of the Revised Statutes, entitled "of the place and manner in which property is to be assessed."

Printed No. 363, G. O. 358. Introduced by Mr. Lewis:

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York."

Printed No. 61, G. O. 59. (Senate.) Introduced by Mr. Daggett :

An act in relation to sealers of weights and measures in the city of Brooklyn.

Printed No. 597, G. O. 564. Introduced by Mr. Curtis:

An act to amend subdivision second of the certificate of articles of incorporation of the Northern Tier Masonic Mutual Relief Association.

Printed No. 305, G. O. 320. (Senate.) Introduced by Mr. Ellsworth:

An act to amend chapter 402 of the Laws of 1882, entitled "An act to repeal certain acts and parts of acts."

Printed No. 719, G. O. 687. Introduced by Mr. Dibble:

An act locating the offices of the several town clerks in the State of New York.

Printed No. 152, G. O. 154. (Senate.) Introduced by Mr. Fassett:

An act to revise and consolidate the statutes of the State relating to the custody and care of indigent and pauper children by orphan asylums and other charitable institutions.

Printed No. 365, G. O. 360. Introduced by Mr. Heath:

An act to amend chapter 528 of the Laws of 1880, entitled "An act to provide for the appointment of a board of elections and of registers, canvassers, inspectors and poll clerks of the city of Brooklyn, and to fix their compensation."

Printed No. 233, G. O. . (Senate.) Introduced by Mr. Thomas :

An act to amend an act entitled "An act to amend the act entitled 'An act authorizing the incorporation of rural cemetery associations,'" passed April 27, 1847, being chapter 163 of the Laws of 1860.

Printed No. 521, G. O. 485. Introduced by Mr. Roosevelt:

An act to amend an act entitled "An act to secure to children the benefits of elementary education," passed May 11, 1874, and amended by chapter 373 of the Laws of 1876.

Printed No. 262, G. O. 578. (Senate.) Introduced by Mr. Gibbs :

An act to fix and regulate the terms of office of certain public officers in the city of New York.

Printed No. 528, G. O. 506. Introduced by Mr. Hendrick :

An act to provide for the support of the fire department, and to regulate the salaries of certain officers of the city of Syracuse, and to revise the charter of said city.

Printed No. 3, G. O. 547. (Senate.) Introduced by Mr. Newbold :

An act authorizing the board of education of the city of Poughkeepsie to sell and convey certain real estate owned by said city.

Printed No. 545, G. O. 524. Introduced by Mr. Husted:

An act to amend chapter 367 of the Laws of 1882, entitled "An act to restrict the formation of corporations under chapter

319 of the Laws of 1848, entitled 'An act to provide for the incorporation of benevolent, charitable, scientific and missionary societies,' and the acts amendatory thereof, and to legalize the incorporation of certain societies organized thereunder, and to regulate the same."

Printed No. 554, G. O. 532. Introduced by Mr. Harpending :

An act to abolish the office of railroad commissioners in the town of Potter, Yates county.

Printed No. 202, G. O. 637. (Senate.) Introduced by Mr. Thomas:

An act to amend chapter 365 of the Laws of 1862, entitled "An act to authorize the discharge of mortgages of record in certain cases as amended by chapter 798 of the Laws of 1868, and chapter 551 of the Laws of 1873."

Printed No. 563, G. O. 538. Introduced by Mr. Clarke:

An act to amend chapter 410 of the Laws of 1882, entitled "An act to consolidate into one act and to declare the special and local laws affecting public interests in the city of New York," relative to the tenure of office of clerks and assistant clerks of district courts in the city of New York.

Printed No. 574, G. O. 550. Introduced by Mr. Forsyth :

An act to authorize the board of claims to hear, audit and determine the claim of John Sewell, and to make an award to pay the same.

Printed No. 589, G. O. 555. Introduced by Mr. Noxon:

An act to legalize the acts of the trustees of the "First Presbyterian church of Batchellerville," in selling and conveying certain real estate.

Printed No. 590, G. O. 556. Introduced by Mr. Nash:

An act to amend chapter 675 of the Laws of 1881, entitled "An act to facilitate the payment of school taxes by railroad companies," and the acts amendatory thereof.

Printed No. 596, G. O. 563. Introduced by Mr. Taylor :

An act for the better government of the Inebriates' Home for Kings county, and to amend chapter 483 of the Laws of 1868, entitled "An act to amend an act entitled 'An act to incorporate the Inebriates' Home for Kings county.'"

Printed No. 627, G. O. 585. Introduced by Mr. Veeder:

An act to amend chapter 284 of the Laws of 1874, entitled "An act to authorize the town of Glenville, Schenectady county, to purchase the bridge belonging to the Schenectady Bridge Company," passed April 29, 1874.

Printed No. 624, G. O. 583. Introduced by Mr. Darragh :

An act to amend chapter 268 of the Laws of 1877, entitled "An act in relation to the collection of taxes and the sales of land therefor in certain towns of Queens county," passed May 10, 1877, and the several acts amendatory thereof.

Printed No. 637, G. O. 594. Introduced by Mr. Olin:

An act for the relief of non-resident tax payers who, or whose children or wards are attendants at any free school.

Printed No. 620, G. O. 638. Introduced by Mr. Rosenthal:

An act to extend and define the powers of the Collateral Loan Association.

Printed No. 479, G. O. 428. Introduced by Mr. Clarke:

An act prohibiting the sale or giving away of cigarettes to any minor under the age of fourteen years.

Printed No. 493, G. O. 442. Introduced by Mr. Clarke:

An act to alter the map or plan of the city of New York made and filed by the commissioners of the department of public parks, by striking therefrom so much of the proposed Morris avenue as lies between One Hundred and Sixty-second street and Overlook avenue, and so much of the proposed One Hundred Sixty-fifth street as lies between Winfield place and Sherdian avenue, in the twenty-third ward of said city.

STATE OF NEW YORK.

No. 155.

IN ASSEMBLY,

APRIL 17, 1884.

REPORT OF THE SUB-COMMITTEE OF THE WHOLE.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 301, G. O. 292, entitled "An act to authorize the raising and expenditure of money for improving the condition of streets and avenues in the city of Brooklyn," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton
Kittle
Earl
Childs

Beckwith
Walrath
Geddes

Ely
Pierson
Clinton — 10.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 706, G. O. 515, entitled "An act to amend chapter 639 of the laws of 1868, entitled 'An act to amend the act incorporating the village of Phoenix, in the county of Oswego,' " and the several acts amendatory thereof, reported in favor of the passage of the same with amendments, as follows:

Title 3, section 6, line 26, strike out the word "regulate;" line 128, after the word "apparatus," insert "having been first directed thereto by a vote of a majority of the taxable inhabitants of said village;" line 129, strike out the words "make aqueducts, cisterns and reservoirs;" line 131, after the word "which," insert "has been or."

Title 7, section 1, line 9, after the word "village," insert "intersecting a public highway."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton
Kittle
Earl
Childs

Beckwith
Walrath
Geddes

Ely
Pierson
Clinton — 10.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 625, G. O. 584, entitled "An act to establish a board of county assessors in the county of Richmond," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Beckwith	Ely
Kittle	Walrath	Pierson
Earl	Geddes	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 604, G. O. 573, entitled "An act for the relief of Mary A. Vandewater, administratrix of Henry Vandewater, deceased," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Pierson
Kittle	Geddes	Price
Earl	Ely	Clinton — 10.
Beckwith		

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 321, G. O. 315, entitled "An act to define the boundary along Hemlock lake between the towns of Canadice, in the county of Ontario, and Conesus, in the county of Livingston," reported in favor of the passage of the same with an amendment as follows:

Change section 2 to section 3, and insert in lieu of section 2 as follows: "§ 2. Nothing in this act contained shall affect any action commenced, or any right of action acquired involving the question of the true location of the boundary line between the said towns of Conesus and Canadice prior to the passage of this act."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Walrath	Pierson
Earl	Geddes	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 426, G. O. 405, entitled "An act to authorize the board of supervisors of Kings county to make suitable provision to reimburse John Cunningham for all legitimate costs, counsel fees and expenses which were incurred by him in and about a certain action brought against him while holding the office of commissioner of charities for the county of Kings," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Walrath	Pierson
Earl	Geddes	Clinton — 9.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 712, G. O. 678, entitled "An act for the relief of the graduates of the College of Physicians and Surgeons of Buffalo," reported in favor of the passage of the same with amendments as follows :

Section 1, line 3 strike out the word "shall" ; line 5 strike out the words "have been" and insert "were in the year 1883 at the annual examination."

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Ely
Kittle	Allen	Pierson
Earl	Geddes	Price
Beckwith	Haskell	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 560, G. O. 535, entitled "An act to authorize the comptroller of the city of New York to examine the claim of Robert T. Bailey, and to audit and pay the amount that may justly be due," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Walrath	Ely
Kittle	Allen	Pierson
Earl	Geddes	Price
Beckwith	Haskell	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 519, G. O. 471, entitled "An act to provide for and define the public or legislative printing," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Pierson
Kittle	Geddes	Price
Earl	Haskell	Clinton — 11.
Walrath	Ely	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 517, G. O. 467, entitled "An act to establish the pier line on the Brooklyn shore of the East river, between Bushwick and Newtown creeks," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote :

For the Affirmative.

Dayton	Allen	Pierson
Kittle	Geddes	Price
Earl	Haskell	Clinton — 11.
Walrath	Ely	

Mr. Dayton, from the sub-committee of the whole, to which was referred the Assembly bill No. 459; G. O. 420, entitled "An act to authorize the election of an additional justice of the peace of the city of Brooklyn, and to create an additional district therein," reported in favor of the passage of the same with amendments as follows:

Section 1, strike out all after the word "the" in line 4, down to word "ward" in line 5, and insert "third, fourth, eighth, ninth, eleventh, thirteenth and twenty-fourth"; line 6, strike out the words "and a resident of said fourth district."

Section 2, lines 7 and 8, strike out the words, "aforesaid by the common council."

Section 4, lines 4 and 5, strike out the words "fourth judicial district of the"; line 5, strike out the words, "as herein created."

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Walrath	Ely
Kittle	Allen	Pierson
Earl	Geddes	Price
Beckwith	Haskell	Clinton — 12.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 290, G. O. 682, entitled "An act to amend an act entitled 'An act concerning the settlement and collection of arrearages of unpaid taxes, assessments and water rates in the city of Brooklyn, and imposing and levying a tax, assessment, and lien in lieu and instead of such arrearages, and to enforce the payment thereof,' passed March 16, 1883," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Kittle	Walrath	Pierson
Earl	Geddes	Price
Beckwith	Ely	Clinton — 9.

For the Negative.

Dayton — 1.

Mr. Dayton, from the sub-committee of the whole, to which was referred the Senate bill No. 148, G. O. 452, entitled "An act in addition to and amendatory of the several acts relating to a supply of water in the city of Albany," reported in favor of the passage of the same without amendment.

Said bill was ordered reported by the following vote:

For the Affirmative.

Dayton	Childs	Ely
Kittle	Walrath	Pierson
Earl	Geddes	Clinton — 9.

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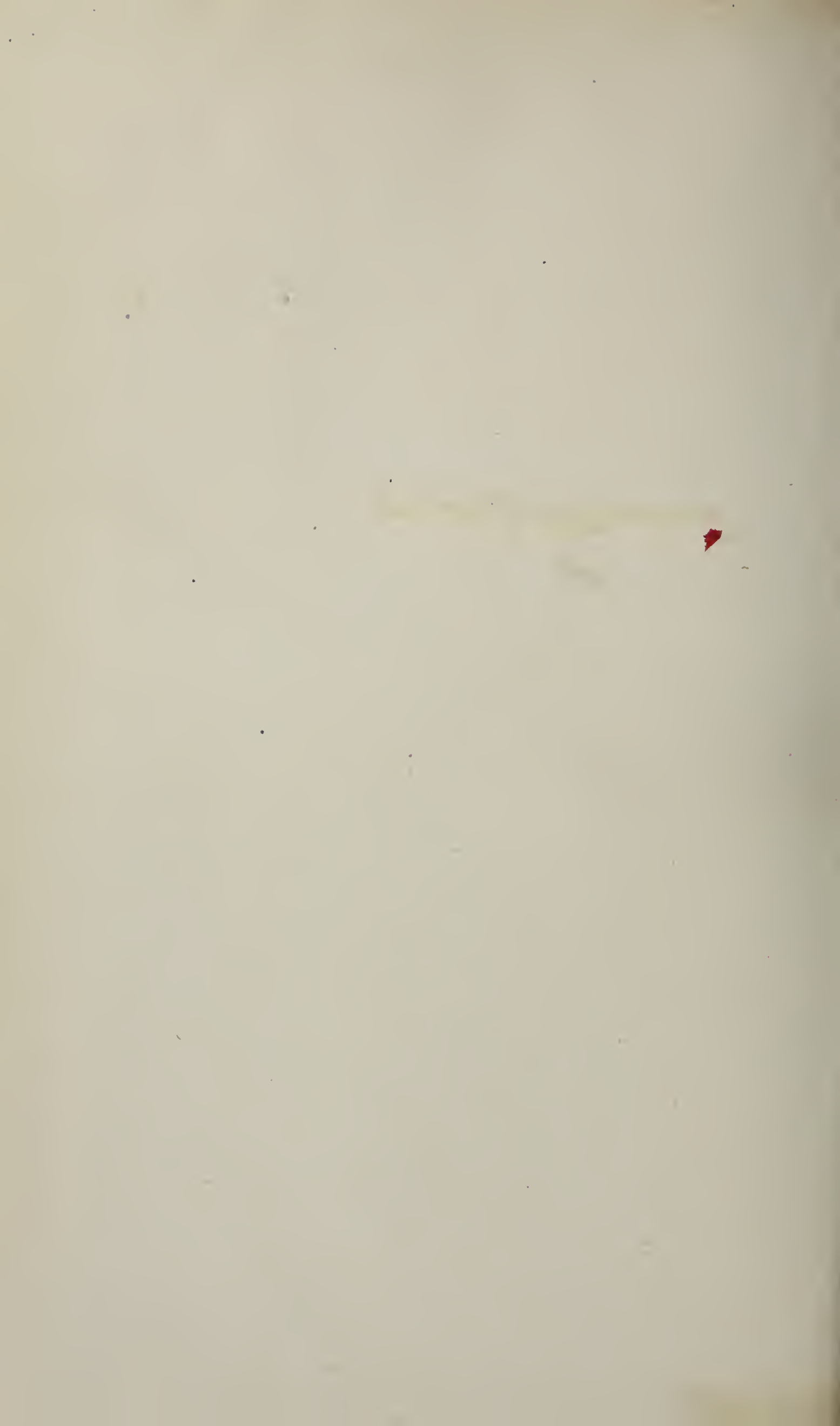
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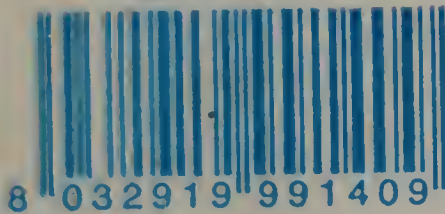
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